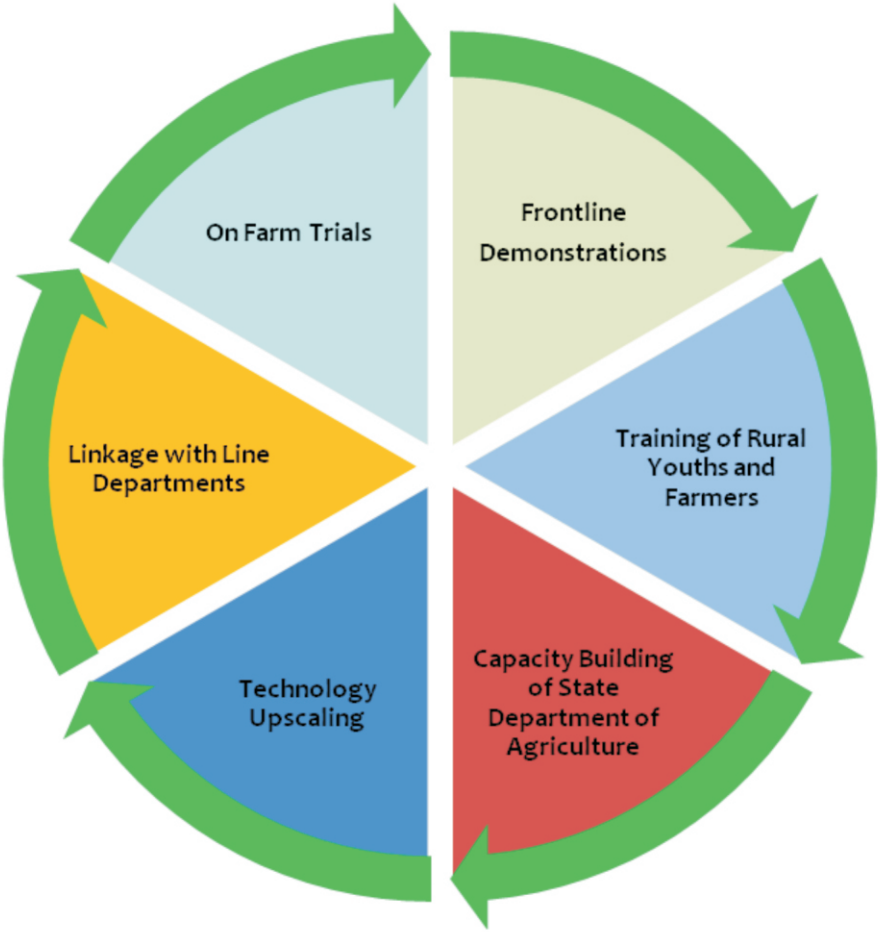
EVALUATION OF KRISHI VIGYAN KENDRAS (KVK) FOR CATEGORIZATION INTO A, B, C & D CATEGORIES



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Acronyms

ATIC	Agricultural Technology Information Centres
ATARI	Agricultural Technology Application Research Institute
ATMA	Agricultural Technology Management Agency
CAU	Central Agricultural University
DU	Deemed University
FAOSTAT	Food and Agriculture Organization, Statistics Division
FGD	Focus Group Discussion
FLD	Front Line Demonstration
FYP	Five Year Plan
GDP	Gross Domestic Product
HYV	High Yielding Varieties
IARI	Indian Agricultural Research Institute
ICAR	Indian Council of Agricultural Research
ICT	Information & Communication Technology
INCCA	Indian Network of Climate Change Assessment
IPCC	Inter-governmental Panel on Climate Change
KVK	Krishi Vigyan Kendra (Farm Science Centre)
MNC	Multi National Corporation
MSP	Minimum Support Price
NABARD	National Bank for Agriculture and Rural Development
NGO	Non-Governmental Organization
NILERD	National Institute of Labour Economics Research and Development
NITI	National Institution for Transforming India
NREGS	National Rural Employment Guarantee Scheme
OECD	Organization for Economic Cooperation and Development
OFT	On Farm Testing
PCs	Project Coordinators
PSU	Public Sector Undertaking
R&D	Research and Development
SAMETI	State Agriculture Management & Training Institute
SAU	State Agricultural University
SMS	Subject Matter Specialist
TADA	Technology Assessment and Demonstration Application
TNAU	Tamil Nadu Agricultural University
TOC	Theory of Change
ZPDs	Zonal Project Directorates

Preface

Ever since the establishment of the very first Krishi Vigyan Kendra (KVK) by the Indian Council of Agricultural Research (ICAR) during 1974, the network of KVKs as a science–based institution, has grown leaps and bounds in more or less every district across the country. In some cases, there is more than one KVK in a single district, with the present strength of 662 KVKs. Visionaries in the field of agriculture sector, from time to time are giving direction and setting the agenda for KVKs in order to make the KVK system more pro-active and an efficient interface between the farming community and the National Agricultural Research System (NARS). Innovations, refinement and diffusion of improved and traditional technologies and dissemination of knowledge are some of the core activities of KVKs.

Over a period of four decades, since the set-up of KVK system at grass-root level, spectrum of the mandated and core functions of KVKs are enlarged to address all the day-to-day issues of farming community in a seamless manner. Currently, the KVKs are performing multi-dimensional roles, starting from core activities such as technology backstopping, resource-conservation methods, introduction of cutting-edge techniques, and up-scaling at one end, and envisioning entrepreneurial opportunities in rural areas, providing vocational/skill training to rural youth, women folks on the other end. These Institutions are also effectively using the latest tools of ICT in dissemination of information for extended reach with richness.

Time and again, there were empirical evidences to prove that the KVK System has positively impacted the quality of life of farming community in terms of income, yield, productivity, and above all capacity for optimal utilization of resources etc. It also made a tangible impact in the areas of integrated farming, crop diversification, value addition, biodiversity, organic farming, horticulture, dairying, veterinary & animal husbandry, fisheries etc. However, the inter-state diversities due to agro-climatic conditions, non-uniform agrarian dynamics of each district, dissimilar institutional framework are reasons for non-uniform outcomes and efficacies from each KVK.

Against this background Indian Council of Agricultural Research (ICAR), an Apex level body governing the entire system of KVKs has sponsored a Study on Evaluation of Krishi Vigyan Kendras (KVKs) for categorization into A,B,C and D categories and entrusted NILERD for in-depth examination, vis-à-vis functioning of KVKs established till XII FYP looking into their infrastructural set-up, mandated activities, impact of such activities, and allied functions.

The study was undertaken by (i) collecting comprehensive data for the last 5 years from 625 KVKs, (ii) capturing 360 degrees information from all the stakeholders by Focus Group Discussions (FGD), brainstorming sessions from 61 KVKs, 11 ATARIs across the country. The information was collated, translated into tangible, measurable scale, and adjudged with appropriate weights and statistical approaches to minimize bias. Thus the ranking of KVKs of each district was prepared based on a combination of factors that influence the performance of KVKs.

NILERD puts on record its gratitude and duly acknowledges ICAR for their crucial academic and research inputs from time to time, logistic and financial support to NILERD in successfully conducting the Study. NILERD also puts on record the overall support rendered by scientists of all the KVKs who responded including 61 KVKs where field survey was conducted and 11 ATARI Directors and their scientists in documenting the field level

issues. Our special thanks to Dr. A.K. Singh, DDG (Agricultural Extension) and Dr. Randhir Singh, ADG (Agricultural Extension) and other scientists at the ICAR Headquarters for their unstinted support in bringing the study to a logical end.

Efforts of Core Research Team of NILERD led by Dr. M. R. Prasad, Dr. Shachi Joshi, and Mr. Indrakumar for their relentless efforts till the logical end are appreciated and duly acknowledged.

Place: NILERD, Narela, Delhi
Date: December, 2017

(**Prof. ARUP MITRA**)
Director General

EXECUTIVE SUMMARY

Agriculture and allied sectors are not only critical to meet the food and nutritional demands of the teaming population but also for the overall development of the country. At present, there are challenges like doubling of farmers' income, by optimal and eco-friendly resources-land, labour, capital and management, producing 'more-from less-for more' with agriculture becoming more and more knowledge demanding. The contribution of agriculture during the past two decades is falling, except a few States bucking the national averages and surpassing with double digit growth in agriculture and allied sectors. These models have to be examined for rest of India and to be emulated on a large scale. Besides, the national figure of foodgrain productivity is far less in comparison to several developed countries and there are wide yield-gaps amongst States within India. There is a continuous need of generating and transfer of location specific technologies which are economically viable and socially desirable. The agriculture growth is facing a multitude of challenges which call for not only improved technology but also quality market support, and inputs favourable polito-climate, etc.

In the background of the above scenario, there is well-set network of agricultural research, education and front-line extension-National Agricultural Research System (NARS). There are dedicated ICAR research Institutes across the country, apart from Central and State Agricultural Universities. In order to provide technologies which have location-specific focus and a dedicated science-based institutions for linkage with farmers and other stakeholders, with a strong feed-back system with NARS, the ICAR has now setup Krishi Vigyan Kendras (KVK) in every district with the first KVK established during 1974. At present there are 662 KVKs under various institutions (ICAR, SAUs/CAUs/NGOs State Govts/PSUs/Educational Institutions and administered, monitored at Zonal level by eleven Agricultural Technology Application Research Institutes (ATARI)

Looking at the demand from stakeholders, policy-makers and the vibrant nature of the KVK set-up, there had been continuous efforts to modify the roles of KVK. At present, the mandated activities of KVK are:

- Conducting " on-farm trials (OFT)" for identifying technologies in terms of location-specific sustainable land use system;
- Organizing training to update the extension personnel with emerging advances in agricultural research on regular basis
- Organizing short and long-term training courses in agriculture and allied vocations for the farmers and rural youth with emphasis on 'learning by doing' for higher production on farms and for generating self-employment; and
- Organizing Front Line Demonstrations (FLD) on various crops and other allied agriculture sectors to generate production data and feedback information

There are several empirical evidences to prove that the KVK system has contributed enormously in overall improvement of the quality of life of farmers vis-s-vis income, agricultural productivity, introduction of cutting-edge technologies, resource conservation approaches, organic farming, diversification of agricultural activities, training of rural youth, farm women for entrepreneurial set-up, development of integrated farming systems, models of climate resilient agriculture, use of ICT for information dissemination, etc. It is an established fact through field-based stakeholder analysis that there is a tangible progress in the agrarian sector due to the presence of KVK in each district for providing single window technology and services within the easy reach of all the stakeholders. However, the KVKs are functioning throughout India in an unequal, dissimilar, highly diverse environments and thus, their contributions are also varying in terms of effectiveness and impact in the districts.

The present study on Ranking of KVKs was entrusted to NILERD (Autonomous body of NITI Aayog, Govt. of India) by the ICAR, and is aimed at gauging the overall performance of each KVK in a comprehensive manner with the following specific objectives:

i. To develop parameters for the evaluation of KVKs,

ii. To classify KVKs for their performance into A,B,C, and D categories on the basis of various parameters,

iii. To identify factors that facilitate/hamper the functioning of KVKs and means to upgrade the KVKs.

Ranking Methodology

Necessary parameters for measurement and data to be collected on census basis from 625 KVKs (established upto the XII FYP) under four major heads are further split into different items along with weightage to cover the entire gamut of activities of KVKs. These parameters were finalized after due deliberations with all the stakeholder. The details are given below:

i.	Infrastructure (total 12 items):	15% weightage
ii.	Technology Assessment, Dissemination and Training (total 11 items):	35% weightage
iii.	Impact of KVKs mandated activities (total 12 items):	30% weightage
iv.	Allied activities & accolades (total of 13 items):	20% weightage

Multipronged strategy of data collection was adopted, i.e., primary data collection through comprehensive questionnaire and interactions at the KVK level, covering SMSs, farmers, youth, women etc. A detailed questionnaire which was earlier pre-tested and refined accordingly was mailed to all the 625 KVKs and filled-in questionnaires, duly vetted by the respective Director of ATARIs were processed for analysis. Data of the preceding 5 years were collected to assess the impact on cumulative basis. The weights obtained by the KVKs in each of the above category and cumulatively were normalized to put all the weights into a uniform range of '0' to '1'. Thus the KVKs as per their obtained scores within the range were categorized as 'A', 'B', 'C', & 'D' ranks. The ranges of ranks were 'A'= 0.76 to 1.0, 'B'= 0.51 to 0.75, 'C'= 0.26 to 0.50, and 'D'= 0.0 to 0.25. In addition, random field survey covering two KVKs under each rank, falling under each ATARIs (8) was conducted, including indepth interactions with the stakeholders to capture the ground level realities and to have feedback for enhancing efficiency.

Impact and Efficacy of KVKs

Prior to ranking of KVKs, all the parameters that were considered for the ranking, and sequential flow of activities upto the last stage were clearly spelled-out. The last stage included physical and tangible assets in the order of (a) Input, (b) Process, (c) Output, (d) Outcome, and (e) Impact. The data collected from the KVKs covered all the above activities and the highlights of coverage based on preceding five years, responses of 625 KVKs were:

i. Over 63,000 villages benefitted from the KVK system.

ii. Around 54,414 OFTs, and 3,02,170 FLDs were undertaken for assessment and demonstration to the stakeholders.

iii. The KVKs organized 2,29,025 trainings covering 64,98,700 farmers, 12,18,403 youth, and 18,17,038 farm women.

iv. Over 29,000 affecting different farming systems were identified, 28,000 OFTs designed and 24,000 problems solved. Further 14,600 on-farm trials were laid out for demonstration, referred to the NARS for working out appropriate solutions.

v. There was a visible impact on farm productivity and income of the farmers.

vi. Around 26,500 Trainings were conducted in areas where rural employment and business opportunities existed and 1,24,000 youth have started their own ventures for gainful employment.

vii. Over 8,900 units were established with the advisory and training support by the KVKs for processing of seeds, reduction of post-harvest losses and farm produce value addition, etc.

viii. Linkages were established with 8,200 Institutions, and 3,800 sponsored programmes were undertaken.

Outcome of Field Visits

Views of ATARIs

During visits it emerged that some KVKs have not properly documented their activities due to lack of capacity to document the facts. So, they got low ranking, though they have been performing well. It was observed that KVKs also are to be judged by including more qualitative parameters, financial & administrative management, work climate, locational disadvantages etc.

Views of KVKs

Because KVKs are functioning under different management control, there are variations in service conditions of staff. There needs to be uniform service conditions across different management to encourage mobility. Further, KVKs are being involved in other adhoc activities by the State Govt. authorities, which severely impacts their performance of mandated activities. It has emerged out of discussions that the ban on filling up of vacancies in some states should be removed. Further, at every KVK, one post of Computer Operator is urgently required.

Comparison of KVKs under four categories

There are some differences in the four groups of KVKs falling in four rankings, i.e., 'A', 'B', 'C', & 'D'. These major differences were in weak infrastructure and poor outcomes. However, these differences were only relative, and a very large percent of KVKs got placed in 'A', 'B' ranks, and only a miniscule of 9% were in 'C' and 'D' ranks. It was worth noting that basic functions, mandates and scientific approach in terms of process and feed-back support was not compromised in any of the KVKs across the ranks.

Ranking of KVKs - In-depth Analysis

Broadly, there are two main aspects affecting the performance of KVKs vis-à-vis (i) location specific environmental factors such as district agrarian dynamics, and (ii) internal factors like type of management, year of establishment of the KVK, infrastructure, mandated activities, outreach of KVK etc. This study's focus was on quantifiable aspects within the internal factors, and categorization was based on (a) overall rank, (b) ranking based on core activities and (c) ranking based on infrastructure. These ranks were then correlated with (i) type of management (ii) period of establishment, (iii) Zonal and Inter-State variations.

Need to give impetus to absolute performance of KVKs

Overall signals from the whole gamut of ranking were very encouraging and positive. In general there were good trends in all the aspects of performance, and delivery mechanism. Rankings also revealed the areas of attention for further focus and to increase the effectiveness out of KVK system as a whole. It has been found that in overall performance, there were only 1% KVKs in 'D' category, and another 8% in 'C' category. Though, in relative terms, their number was small, and they might be performing upto the mark in absolute terms, but could not document in effective way. Yet, these group of KVKs need to be brought at par with others by strategic interventions in deficient areas.

Need to strengthen Infrastructure of KVKs falling in C & D categories.

Infrastructure is the core of performance and it has direct consequences on the overall performance and directly impinging on the mandated activities. KVKs suffering with insufficient infrastructure are really handicapped to deliver their mandated activities.

Around 40% (249) of the KVKs are pushed back in terms of infrastructure. ICAR may thoroughly examine the bottlenecks and make concerted efforts to provide the required infrastructure.

There were inter-zone, inter-state variations in ranks, so also there were asymmetries and non-uniformities with respect to type of management and period since establishment. There are KVKs established two and three decades ago and were expected to work at full efficiency but were lagging behind compared to newly established KVKs. These KVKs may be identified and their working may be fine-tuned with a focus on mandated activities.

CHAPTER I

INTRODUCTION

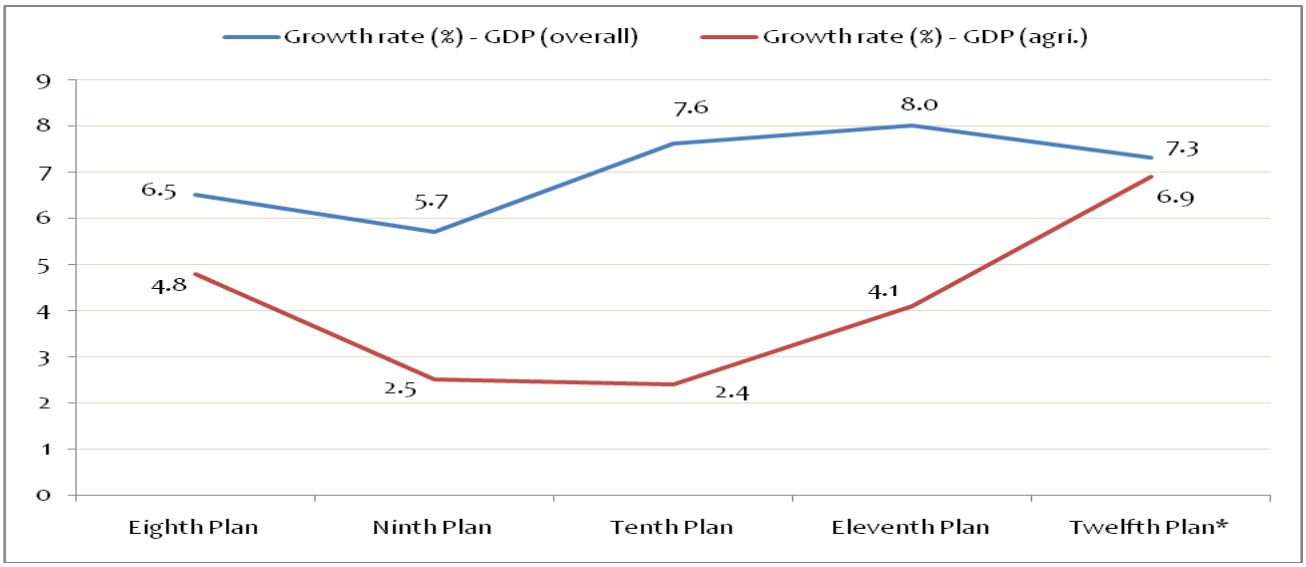
1.1 Background

The agriculture and allied sector is critical to the sustainable growth and development of the country. The issue of growth in agriculture has assumed a global concern in view of meeting the Sustainable Development Goals of producing enough food to end hunger, achieving food security and improved nutrition and promoting sustainable agriculture for a rapidly growing world population. In this context, the role of such agricultural technologies which could be integrated into the existing farming systems under different agro-ecological situations for boosting production of various commodities and in turn increasing income of the farmers assumes significance.

The agriculture sector in India is pivotal not only to meet the food and nutritional requirements of the people but also for its significant contribution to production, on-farm income, employment and demand generation through various backward and forward linkages. Hence, rapid growth of agriculture is critical to inclusive growth. Since the adoption of new economic policy in 1991, the country's economy has undergone a paradigm shift. Manufacturing and services sectors have emerged as the leading contributors to the country's income. Agriculture has started losing its grip as the primary sector in terms of contribution to national income and employment. The sector has lost its position in employment generation and GDP (Gross Domestic Product) contribution. Agricultural GDP has drastically decreased after the end of green-revolution era.

In addition, growth in agricultural GDP has shown a high volatility – ranging from 4.8 per cent per annum in the VIII Five Year Plan (FYP) (1992-96) to 2.4 per cent during the X (FYP) (2002-06) before rising to 4.1 per cent in the XI FYP (2007-12). A major reason for high volatility of the sector is its continued dependence on the vagaries of nature, climate change, technology fatigue, etc. Figure 1.1 depicts the growth performance of agriculture during the various Plan periods.

Figure 1.1: Agricultural Growth Rate during different Plan Periods



Note: * Twelfth Plan Growth Rates for Agriculture are estimated after three year average.
Source: Economic Survey, Government of India, different years

It is noteworthy that growth of agriculture and allied sectors at the state level differs from that at the national level. For instance, at the national level the GDP from the agriculture and allied sectors grew at the rate of 4.7 per

cent in 2013-14 (at constant 2004-05 prices), but the States of Gujarat, Madhya Pradesh and Himachal Pradesh registered double-digit growth during the same period (M/o Agriculture & Farmers Welfare, 2015-16).

1.2 Share of Agriculture in GDP

As has been mentioned earlier, industries and services have emerged as the leading contributors to the country's GDP. As a natural consequence of economic growth and structural change in economy, the share of agriculture and allied sectors declined from around 19% in 2004-2005 to 14% in 2013-2014. However, nearly 50% of the population is dependent on agriculture for its livelihood hence the sector continues to be the backbone of the economy through its multiplier impact. Table 1.1 depicts the changing share of agriculture in the country's GDP.

Table 1.1: Sector-wise Share in GDP (%) at Constant Prices, 2004-05

Year	Sectors		
	Agriculture & Allied	Industry	Services
2004-05	19.0	27.9	53.0
2005-06	18.3	28.0	53.7
2006-07	17.4	28.7	54.0
2007-08	16.8	28.7	54.4
2008-09	15.8	28.1	56.1
2009-10	14.6	28.3	57.1
2010-11	14.6	27.9	57.5
2011-12	14.4	28.2	57.4
2012-13	13.9	27.3	58.8
2013-14	13.9	26.1	59.9

Source: State of Indian Agriculture 2015-16, M/o Agriculture & Farmers Welfare, Directorate of Economics and Statistics, Govt. of India, New Delhi

1.2.1 Share of Agriculture and Allied Activities in GSDP

The above data reflect a declining share of Agriculture in GDP of the country while it has been observed that the share of agriculture in some of the states is much above the national average. In Arunachal Pradesh, agriculture and allied sector contributed to about 30 per cent of GSDP at the constant prices, 2004-05, (State of Indian Agriculture, 2015-16).

1.3 Position of India in World Agricultural Production

The country is leading in production of some major agricultural products. Globally, India is the third largest producer of cereals, with only China and the USA ahead of it. India occupies the first position in total pulses and milk production, second (to mention a few) in rice, wheat, tea, vegetables, fruits and is the third largest producer of fish and second largest producer of inland fisheries in the world (Table 1.2). On the whole, India is poised for growth and we are proud that India is now second in agricultural GDP after surpassing the United States of America, and there is a propitious outlook of its becoming one of the world's fastest growing economy.

1.4 India vs Other Countries

While the country is doing well as far as production of several items of agricultural produce is concerned, a comparison with other countries brings out that productivity is low as compared to many countries. The average yield for cereals is low as compared to many peer countries and the World average. Cereals together with coarse cereals occupy more than half of the total cultivated land in India. The South and East Asia region produced 40% of the World's cereals in 2013-15, and it is expected that the agricultural output in the region will expand by almost 20% over the next decade through intensification and improvements in efficiency (OECD/FAO, 2016). It is in this context that the Hon'ble Prime Minister – Shri Narendra Modi has made a herculean call for increasing India's foodgrains production by atleast one ton (present 2 tonnes) to match with other countries.

Table 1.2: Position of India in World Agriculture Production

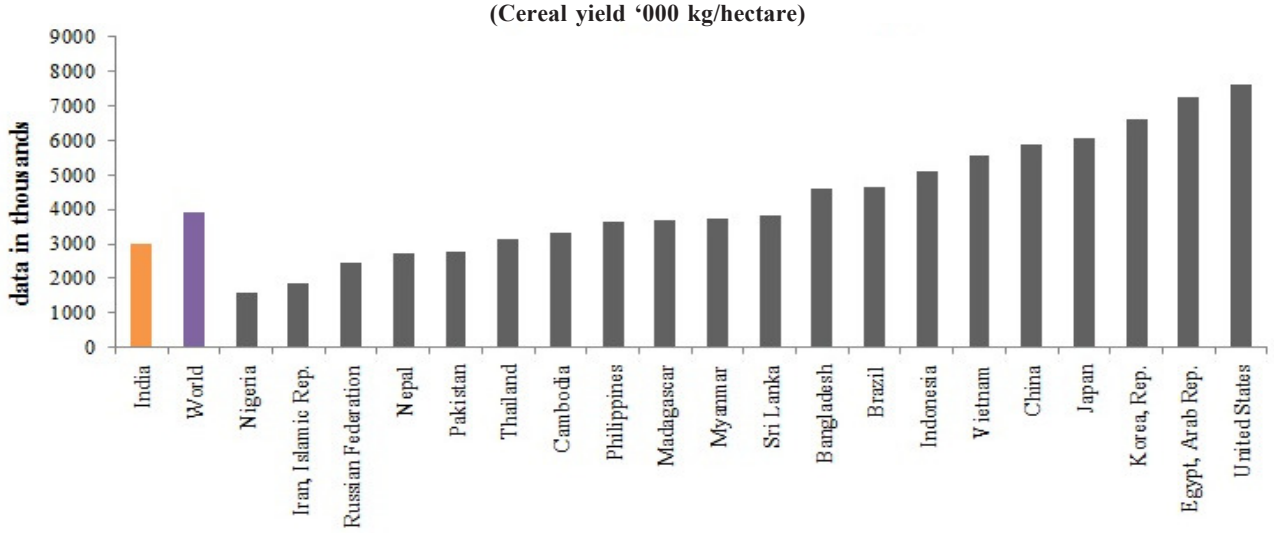
Product	Rank				
	I	II	III	IV	V
Rice		•			
Wheat		•			
Maize					•
Total pulses	•				
Cotton (lint)		•			
Groundnut (in shell)		•			
Sugarcane		•			
Tobacco leave			•		
Tea		•			
Vegetables		•			
Potatoes		•			
Onion (dry)		•			
Fruits		•			
Total milk	•				
Eggs		•			
Chicken (number)					•
Fisheries		•			

Source: FAOSTAT

The low productivity of this sector may be attributed to reduced soil fertility and depleting quality of ground water, lack of availability of technologies, higher input costs, low prices of output and declining productivity, climate change, lack of availability of credit, marketing support, policies support etc. which have contributed to low growth rate in agriculture, thereby low per capita agricultural income.

Figure 1.2: Agricultural Productivity of India vis-à-vis Other countries

(Cereal yield '000 kg/hectare)



Source: World Development Indicators (data for 2014), World Bank

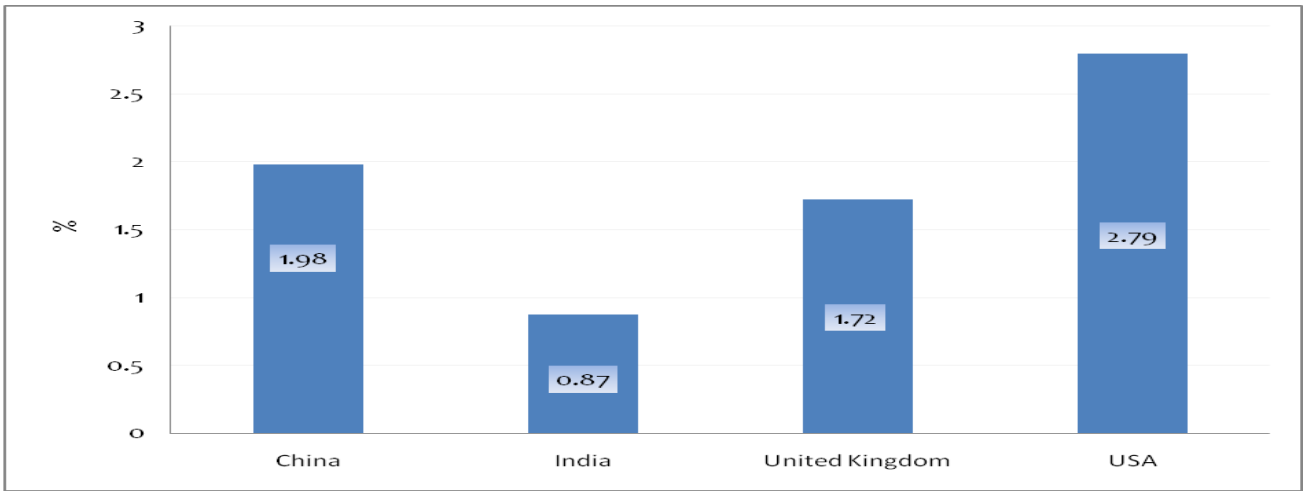
Not only are there wide differences in yield among two countries, even within India, there are wide differences in inter-state yields. The foodgrains production (2014-15) in Punjab was over two times more to the All India average, 5.3 times more to that of Maharashtra and 1.5 times more to that of West Bengal (Agricultural Statistics at a Glance 2016). Average farm size being small coupled with low agricultural productivity contributes to rural poverty and a widening income gap between the richer and poorer states. Recently, a call for Doubling Farmer's Income by 2022 has been made by the Hon'ble Prime Minister – Shri Narendra Modi. Pertinent issues include fragmentation of landholdings, slow mechanisation and low productivity gains as well as agricultural marketing reforms to enable increase in farmers' incomes.

State approaches vary with regard to influencing agricultural productivity (OECD, 2017). Andhra Pradesh and Rajasthan first experimented with farm consolidation via the National Land Records Modernization Programme targeting at digitisation of land records. A number of States including Madhya Pradesh and Punjab have encouraged mechanisation by establishing custom hiring centres for renting out machinery to small and marginal farmers. Another State – Karnataka – has partly deregulated farmers' access to markets.

1.5 Expenditure on Research and Development in Agriculture Sector

In order to boost agricultural productivity there is a need to increase fund allocation for the sector. Plan Allocation for agriculture and allied sectors is very low at present. In the total allocation, share of agriculture sector was 4.4% during 1997-2002; reduced to 3.9% and further to 3.7% during the periods 2002-07 and 2007-12 respectively. However, it increased to 4.7% during XII Five Year Plan period. Expenditure incurred on Research and Development (R&D) in agriculture sector is also low which is critical to agricultural development for making the country food and nutritionally secure. A comparison of expenditure on R&D by some countries showed that USA spends 2.79% of its GDP on R&D, China 1.98% while India's expenditure on agriculture R&D is only 0.87% (Figure 1.3).

Figure 1.3: Expenditure on R&D as % of GDP in different countries in 2011-12



Source: World Bank

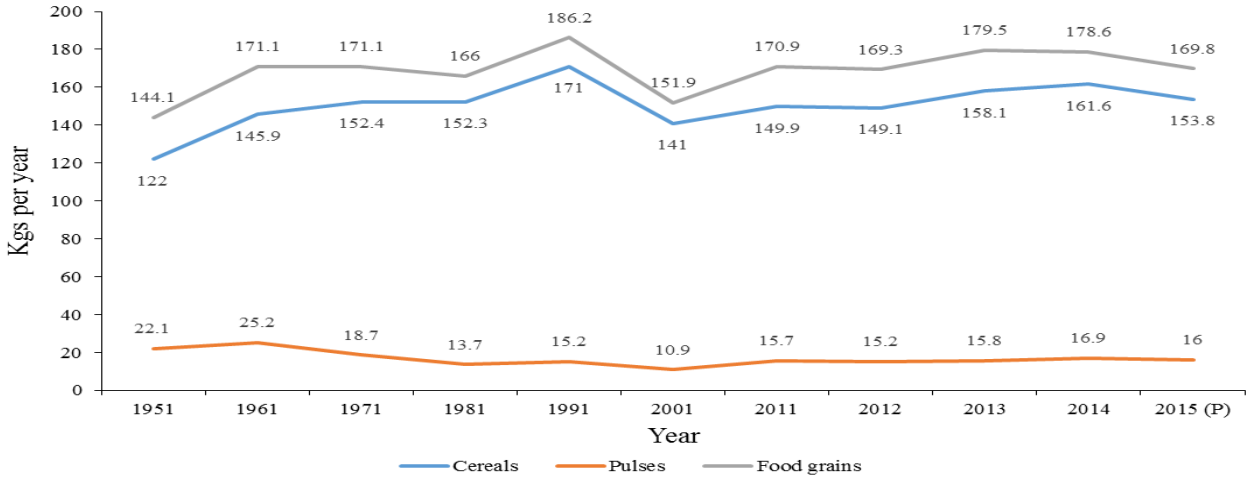
1.6 Per Capita Availability of Foodgrains in India

Food production provides the base for food security as it is a key determinant of food availability. When the country is compared with the world average in parameters such as total arable land, population, various crop productions etc., it has been observed that India occupies seventh position in the case of arable land, while it is the second populous country in the world. Between 1950-51 and 2006-07, production of foodgrains (comprises production of rice, wheat, coarse cereals and pulses) in the country increased at an average annual rate of 2.5% as compared to population growth averaged 2.1 % during this period. The rate of growth of foodgrain production however decelerated to 1.2 % during 1990-2007 which is lower than the annual growth rate of population at 1.9 %. The per capita availability of cereals and pulses consequently witnessed a decline (Figure 1.4).

Besides pulses and cereals, milk and eggs etc. play a critical role in providing nutritional security. Per capita availability of milk increased from 124 g/day in 1950-51 to 176 g/day in 1990-91 to 290 g/day in 2011-12, a figure comparable with the global trend.

It is pertinent to note that though our total milk production is the highest in the world, yet productivity per animal is extremely low as per international standard. In the case of meat, egg, wool and fish production, substantial

Figure 1.4: Per Capita Net Availability of Foodgrains/Pulses (per annum) in India



Source: Government of India, 2016

progress has been achieved in the country. Per capita availability of eggs has been estimated as 55 eggs per head per annum in 2011-12. Meat production from the recognized sector increased from 1.9 million ton in 1998-99 to 4.9 million ton in 2010-11. Constituting about 4.4 % of the global fish production, the fisheries sector gives employment directly and indirectly to about 145 million people (GoI, 2012).

At present, the country faces several formidable challenges including technology fatigue, shrinking land base, dwindling water resources, the adverse impact of climate change, emergence of new generation pests, low investment in agricultural research and development, less reach of agriculture technology to farmers, shortage of farm labour, increasing costs and uncertainties associated with volatility in international markets.

India will remain a predominantly agricultural country during most of the period of 21st Century, particularly with reference to livelihood opportunities.

Many changes have taken place in agriculture in terms of technological interventions, use of improved machinery and equipments etc. for enhancing agricultural productivity and farm income. However, factors such as sub-division and fragmentation of landholdings, natural calamities, increasing input costs, poor marketing channels, limited warehousing facilities, varied food demands, challenge of producing more from less - continue to pose a major threat.

Hence, all these call for a need to reorient the research and development in agriculture sector towards developing and promoting those technologies that raise agricultural income and ensure more rural employment opportunities in the agri-supply chain to a vast majority of the workforce.

There are significant gaps in backward and forward linkages between the agricultural research conducted in laboratories and the farmer's field. The X and XI Five Year Plans have emphasized the need for effective extension services. The XI Plan Approach Paper also states that "in the longer run, growth in agriculture productivity can be sustained only through a continuous technological progress". This continuous technological progress would require high priorities not only for basic and applied research but also, equally important, to ensure that the results of such research go to the lowest level of the agriculture and allied sectors. The XI Plan shows a concern towards the problem of transfer of technology and knowledge at grass-root level and puts forth challenges before the extension agencies. As agriculture is becoming knowledge intensive, the basic issue in the transfer of knowledge is how to reach the farmers and how to implement the results which are cost effective and socially desirable, especially where the farmers have small size of land holdings. The Plan also highlights that extension services are to be treated as a service delivery mechanism. This calls for a study on the status of the extension services, the

problems and their remedies. The XII Plan also emphasized the need for mechanization of agriculture with robust extension services. The two major factors critical to agricultural production, that need to be addressed, are soil and water.

Pricing of farmers' produce is another concern and ownership in tenancy rights is equally important. There is a need to look into the farmers' requirements arising from natural disasters such as droughts, floods etc. To address the challenges of the agriculture sector, a competitive research system equipped with state-of-art technology and adequate resources is essential. There is a need to establish lab-to-land connect for the use of new and appropriate technologies.

While the National Agriculture Research System (NARS) played a major role in achieving green revolution in the country, in recent years there have not been many major breakthroughs in research. One of the major reason for this is the financial crunch. Agriculture extension can play an important role in dissemination of technology to farmers from lab to land i.e. transfer of technology.

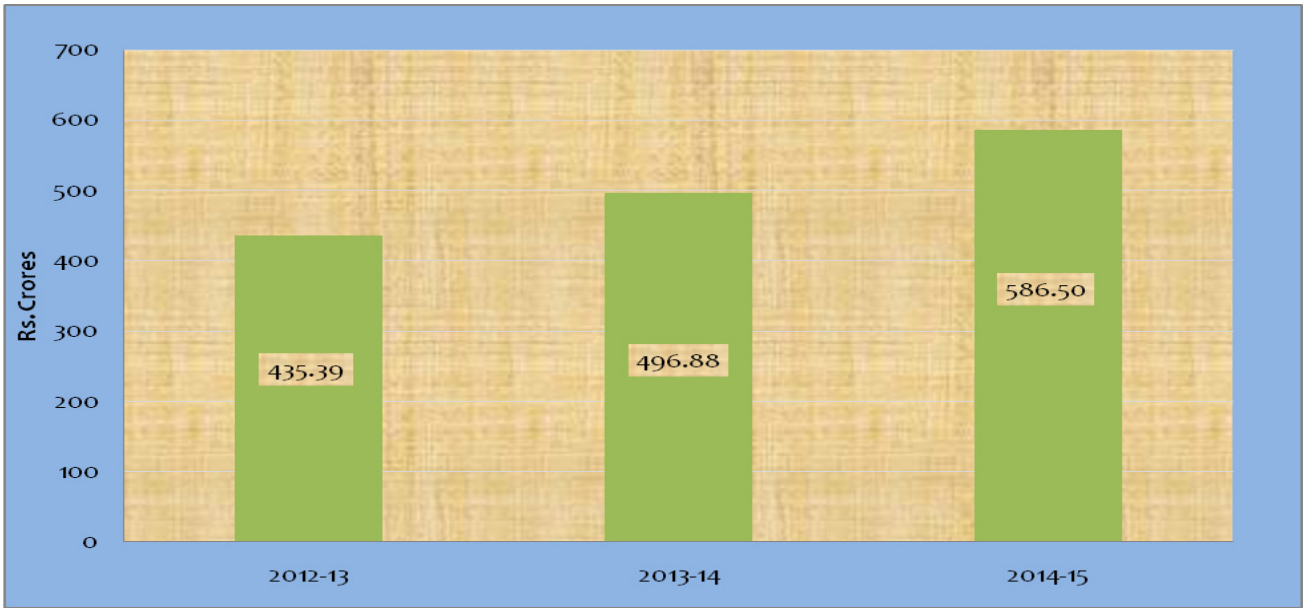
A large number of institutions in the field of agriculture and allied sectors are contributing to research in development of high yielding varieties of crops, technological innovations and other initiatives to boost production and human resource development. The technology available has to suit the necessities of the region keeping in view the nature of its soil, climate, culture and needs and means of the farmers, available human resources, feasibility and viability of different parts of the country. It has been observed that there are variations in knowledge and technological percolation.

Despite the plethora of technologies developed by the scientists, the adoption rate has been low in many States in the country. For example, some states show 100 per cent coverage of High Yielding Varieties (HYVs) of some of the crops, while some states are stuck with only one-third coverage of HYVs. It has been observed that the focus of agricultural research has been mainly on raising production, protection and efficiency in farm operations, whereas adoption of other technologies particularly relating to natural resource management remained low. It has also been observed that recommendations related to different aspects of farming are passed on in isolation rather than a package (NITI Policy Paper No.1/2017).

Extension systems in India have an important role to play in addressing these concerns of Agriculture. During the post-Independence era, agricultural extension in the country was largely the function of State Departments of Agriculture. Some voluntary organisations were also involved in different parts of the country, but with a limited outreach. The Indian Council of Agricultural Research (ICAR) began its participation in agricultural extension through National Demonstrations in 1964. Several institutions have been set up for working towards making Agriculture sector competitive. In this context, the Government of India through ICAR has established a wide network of Krishi Vigyan Kendras (KVKs) in all the rural districts of the country.

The first KVK was established in 1974 in Puducherry. By the end of XI Five Year Plan, there were 630 KVKs. At present, there are 662 KVKs. These KVKs under the aegis of the NARS are the carriers of frontline technologies having location specificity and impart knowledge and skill upgradation for accelerated adoption. KVKs function as Knowledge and Resource Centres supporting public, private and voluntary sector initiatives targeted at improving the agricultural economy of districts and linking the NARS with the extension system and farmers. Under the fully financed scheme of the Government of India, KVKs are working under Agricultural Universities, ICAR Institutes, related Government Departments and Non-Government Organizations (NGOs), as well as PSUs working in the field of agriculture. During the XI Five Year Plan, the revised allocation of KVKs was Rs.2374.20 crore. It has been observed that the amount allocated to KVKs is increasing over the years. The year-wise allocation for KVK schemes is depicted in Figure 1.5.

Figure 1. 5: Year-wise Allocation for KVK Scheme during First Three Years of 12th Plan



In 1992 National Demonstrations, Operational Research Projects, and the Lab-to-Land Programmes were merged with KVKs and front-line demonstrations and on-farm testing were added to the responsibilities of KVKs. Each KVK is headed by Programme Coordinator alongwith a team of six Subject Matter Specialists (SMS). In addition to KVKs, the government introduced District Agricultural Technology Management Agency (ATMA) to make the extension system demand-driven, market-oriented and farmer-accountable. In 2000, ICAR introduced the Agricultural Technology Information Centres (ATIC) in selected ICAR Institutes and State Agricultural Universities to function as a single window for agriculture technology and services in the Universities and Institutes. Other new service providers include private extension agencies, input agencies, agri-business firms, farmers' organizations, producer cooperatives, financial agencies involved in rural credit delivery and consultancy services, etc. The establishment of Agri-Clinics and Agri-Business Centre Scheme was an explicit move by the government towards privatization of agricultural extension services.

1.7 The Present Study

The present study has been assigned to the National Institute of Labour Economics Research and Development (NILERD) by the ICAR. NILERD had earlier as well carried out a study on Assessment of the Impact of Dissemination of Improved Practices and Technologies by KVKs on sponsorship by the ICAR. The results of the study showed that KVKs are playing a proactive role in transferring new technology at field level and with positive impact. Further, some of the KVKs were out-performing others in spite of the fact that all the KVKs have same mandate.

In the present context of achieving food and nutritional security, farm sector is a serious concern for the policy makers. Therefore it was pertinent to assess a vast network of KVKs so that this science based district level institution could be strengthened to play a more proactive role in the development of this vital sector. The present study focuses on developing parameters for evaluation of KVKs, to classify these as A, B, C and D as per their performance during the last five years, to identify the factors that facilitate/hamper functioning of KVKs and suggest strategies to further enhance working efficiency.

CHAPTER II

ORIGIN, GENISIS & GROWTH OF KVKs

2.1 Genesis, Origin and Growth

As the number of unskilled rural youth was fast increasing, the Education Commission (1964-66) recommended that a vigorous effort be made to establish specialized institutions to provide vocational education in agriculture and allied fields at the pre- and post-matriculate levels to cater to the training needs of a large number of boys and girls of rural areas. Further, it was suggested that such institutions be named as Agricultural Polytechnics. The recommendations of the Commission were thoroughly discussed during 1966-72 in the inter-ministerial meetings including Ministry of Education, Ministry of Agriculture, Planning Commission, ICAR and other allied institutions. Finally, the ICAR mooted the idea of establishing Krishi Vigyan Kendras (KVKs) as innovative institutions for imparting vocational training to the practicing farmers, school dropouts and field level extension functionaries. ICAR Standing Committee on Agricultural Extension, in its meeting held in August 1973, observed that since the establishment of KVKs was of national importance which would help in accelerating the agricultural production and also in improving the socio-economic conditions of the farming community, the assistance of all related institutions should be taken to implement this scheme. The ICAR therefore, constituted a committee in 1973 headed by Dr. Mohan Singh Mehta of Seva Mandir, Udaipur (Rajasthan) for working out a detailed plan. The Committee submitted its report in 1974 and as part of the report, the first KVK on a pilot basis was established in 1974 at Pondicherry (now Puducherry) under the administrative control of the Tamil Nadu Agricultural University (TNAU), Coimbatore.

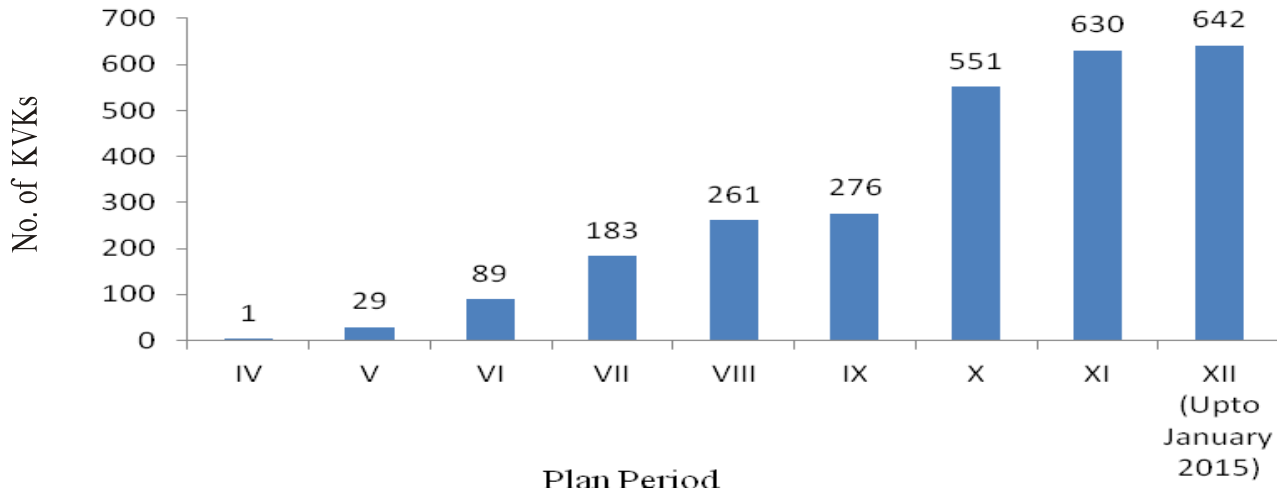
In 1976-77 the Planning Commission approved the proposal of the ICAR to establish 18 KVKs during the 5th Five

Figure. 2.1: File Photo of the very first KVK established in Pondicherry

Year Plan. In the consequent Five Year Plan periods, many more KVKs were established. During the past three decades, several high-powered committees have recommended for establishment of more and more KVKs in different parts of the country. Culmination of the expansion of KVKs reached a peak with the decision of Hon'ble Prime Minister of India announcing on the occasion of the Independence Day Speech on 15th August, 2005 that by the end of 2007 there should be one KVK in each of the rural districts of the country. Expansion of

KVKs has right from the IV FYP to XII FYP up to January, 2015 is depicted in figure 2.2. As the policy of the Government is to reach every nook and corner of the country, presently, the total number of KVKs has reached to 662 (current data available with ICAR/KVK system, 2016-17).

Figure 2.2: Cumulative Growth of KVKs in India



2.2 Changing Vision, Mission, and Mandate

Over a period of time, the Vision, Mission, Mandate, Staff set-up etc. of KVKs have undergone many changes to make it more demand driven. At present, the Vision, Mission and Mandate of KVK are as follows:

Vision: Science and technology-led growth leading to enhanced productivity, profitability and sustainability of agriculture

Mission: Farmer-centric growth in agriculture and allied sectors through application of appropriate technologies in specific agro-ecosystem's perspective

Mandate: Technology Assessment and Demonstration for its wider Application and to enhance Capacity Development (TADA-CD).

To implement the mandate effectively through creation of awareness about the improved agricultural technologies, the following activities are defined for each KVK: (i) On-farm testing to assess the location specificity of agricultural technologies under various farming systems, (ii) Out-scaling of farm innovations through frontline demonstration to showcase the specific benefits/worth of technologies on farmers' fields, (iii) Capacity development of farmers and extension personnel to update their knowledge and skills in modern agricultural technologies and enterprises, (iv) Work as Knowledge and Resource Centre for improving the overall agricultural economy in the operational area, (v) Conduct frontline extension programmes and provide farm advisories, (vi) Using ICT and other media on varied subjects of interest to farmers and (vii) Data documentation, characterization and strategic planning of farming practices. KVK are also required to produce quality technology related inputs/products (seeds, planting materials, bio-agents, livestock, fingerlings etc.) and make them available to farmers, besides identifying and documenting selected farmer-led innovations and converging with the ongoing schemes and programmes within the mandate of KVK.

KVKs are grass root level organizations meant for application of technology through assessment, and demonstration of proven technologies under different 'micro farming' situations in a district. With this in mind, transfer of technology *per se* is not the primary function of KVKs, but field extension activities are carried out to facilitate

on-farm assessment of the newly released technologies, demonstrate the proven ones and train farmers and extension functionaries on the same. The purpose is to develop models of different cost effective farming systems which could be upscaled by the State Extension Services.

2.2.1 Present Scenario of Indian Agriculture - Drivers of Growth

Over the years, Indian agriculture has made tremendous progress due to the contributions of agricultural science and technology through development of improved seeds and planting material, pre- and post-harvesting technologies, disease control and plant protection, irrigation and soil conservation techniques, use of machinery in agriculture resulting in reduction in drudgery etc. In spite of the various interventions in agriculture by the Government, Agricultural Universities, Research Institutions and various other stakeholders, the Indian agriculture productivity remains low as compared to that at international levels. In the dairy sector, India has tremendous potential for increasing the productivity. Several reasons have been attributed to the low productivity which includes interalia technological factors as well as institutional factors. The technological factors include lack of irrigation facilities, use of fertilizers and high yield varieties, farm mechanization, soil erosion, etc. The institutional factors include small size of lamd holdings, lack of backward and forward linkages and transfer of knowledge from research to grass-root level. Indian agriculture in most of the regions depends upon the monsoon rains. Fertility level of agricultural land has been falling with degradation of soil due to indiscriminate use of fertilizers and pesticides. Soil health has depleted and lost its nutrients. The National Bureau of Soil Survey and Land Use Planning (founded in 2005) has estimated that about 146 million ha. of area is suffering from various types of land degradation which includes water erosion, flooding, salinity, soil acidity, etc.

About 62 per cent of the GDP in agricultural sector comes from crops (including horticultural crops). Livestock sub-sector contributes about 22 per cent, forestry about 10 per cent and fisheries about 5 per cent. Available data indicate a slight shift in the distribution away from the crop sector towards livestock and fisheries sub-sectors.

India is moving from the age-old traditional agriculture to modern and mechanized farming but the change is very slow and happening only in some pockets of the country. Farm machinery industries have grown rapidly in order to meet the bulk of the requirement of mechanization inputs and also for export. An array of technologies is available such as plough, harrow, seed driller, horse hoe, threshing machines, tractor, power tillers, implements for clearing, breaking ground, implements for depositing seed, seed-sowing machines-drills, cane crusher, combine harvesters, post-harvest and processing machinery and dairy equipment, implements for the cultivation of the plant – cultivators, implements for gathering crops, implements for clearing, breaking ground, irrigation technology etc.

Despite all these efforts, change has not yet been percolated to various sections of the society uniformly. While the country has over three million tractors in use and it produces over five million annually and stands second only to USA in terms of tractors, the density of tractors per thousand hectares is only 16 in the country as compared to the world average of 19, and 27 in the USA. While good quality of inputs like seeds and planting materials are necessary, extensive use of foreign technologies that are suitable to indigenous conditions is also very much essential.

Climate change is another area of concern for the agriculture sector. Vagaries of nature like floods, draughts, unusual and untimely rain in the country lead to low agriculture production and productivity. The Indian Network of Climate Change Assessment (INCCA) study indicates that there could be a rise in the sea level, increase in cyclonic intensity, reduction in crop yield in the case of the crops which are depending on rain, and reduction in milk. Inter-governmental Panel on Climate Change (IPCC) has predicted that productivity of most of the crops may decrease by 2% to 10% by 2020 and up to 30% by 2050 due to climate change.

A large number of institutions in the field of agriculture and allied sectors are contributing to research in development of high yielding varieties of crops, technological innovations and other initiatives to boost production and human

resource development. The technology available has to be permeated as per the necessities of the region keeping in view its natural resources (soil, climate and water), socio-cultural set-up, resource endowments of the farmers, available human resources, feasibility and viability of the use of technology in different parts of the country. It has been observed that there are variations in knowledge and technological reach in the country

2.2.2 Geographical Expansion of KVKs for Extended Reach

To cater to the needs of the farmers and for transfer of technology from lab to land, Krishi Vigyan Kendras (KVK) have been established by various State Agriculture Universities (SAUs) as well as Government under Indian Council of Agricultural Research (ICAR) system in all the States. Attempts have also been made by the private organizations (NGOs) to this effect. There were 569 KVKs in 2010 and by July 2011 the number increased to 598. At present, there are 662 KVKs – one KVK in each district. There are some districts in large States which have two KVKs. The KVKs have multifaceted roles including technology assessment, its demonstration, providing vocational training to rural youth, gender sensitization and capacity building, skill up-gradation of State Extension Personnel, linkage and capacity building of line departments including Agriculture Technology Management Agency (ATMA) at the District level and State Agriculture Management & Training Institutes (SAMETI).

The zone-wise distribution of KVKs is presented in Table 2.1. At present, there are eleven Agricultural Technology Application Research Institutes (ATARIs), each headed by a Director and are functioning as coordinating unit (Table 2.1). The concerned Directors are under the guidance and supervision of the Deputy Director General (Agril. Extn.) and Assistant Director General (Agril. Extn.) at ICAR Headquarters and are regularly monitoring and guiding the KVKs and their Heads like State Governments, Directors of Extension Education of SAUs, Directors of ICAR Institutes, Chairman/President of NGOs. Further, the Directors of Extension Education of SAUs are also given the responsibility of overseeing the functioning of KVKs under NGOs in their area of operation for technology back stopping. The Annual Workshops are organized in which the ADG from the Headquarters joins for review and for approval of the next year's programme.

Table 2.1: ATARI-wise Distribution of KVKs

Sl. No	States	Total KVKs in the State	ATARIs/Total KVKs in the ATARIs
1.	Himachal Pradesh	12	Ludhiana 64 KVKs
2.	Jammu & Kashmir	19	
3.	Punjab	20	
4.	Uttarakhand	13	
5.	Delhi	01	Jodhpur 61 KVKs
6.	Haryana	18	
7.	Rajasthan	42	
8.	Uttar Pradesh	68	Kanpur 68 KVKs
9.	Bihar	38	Patna 62 KVKs
10.	Jharkhand	24	
11.	Andaman & N. Islands	03	Kolkata 54 KVKs
12.	Odisha	33	
13.	West Bengal	18	
14.	Assam	25	Guwahati 43 KVKs
15.	Arunachal Pradesh	14	
16.	Sikkim	04	
17.	Manipur	09	Barapani 35 KVKs
18.	Meghalaya	05	
19.	Mizoram	08	
20.	Nagaland	09	
21.	Tripura	04	
22.	Goa	02	Pune 75 KVKs
23.	Gujarat	29	
24.	Maharashtra	44	
25.	Chhattisgarh	20	Jabalpur 67 KVKs

26.	Madhya Pradesh	47	
27.	Andhra Pradesh	21	Hyderabad 67 KVKs
28.	Puducherry	03	
29.	Tamil Nadu	30	
30.	Telangana	13	
31.	Karnataka	31	Bengaluru 46 KVKs
32.	Kerala	14	
33.	Lakshadweep	01	
	National Level	**642**	**11 ATARIs 642 KVKs**

Source: Latest KVK Telephone Directory, ICAR, New Delhi

The spread of KVKs in different states is depicted in Figure 2.3. Among the Statees, Uttar Pradesh has a maximum of 68 KVKs followed by Madhya Pradesh and Maharashtra with 47 and 44 KVKs respectively.

The above information shows that KVKs have their existence in all the States and Union Territories (UTs) across the country.

2.3 Mandated Activities of KVK

The mandated activities of KVKs are:

- Conducting "On-Farm Testing" for identifying technologies in terms of location-specific sustainable land use system.
- Organising training to update the extension personnel with emerging advances in agricultural research on regular basis.
- Organising short- and long-term training courses in agriculture and allied vocations for the farmers and rural youths with emphasis on "learning by doing" for higher production on farms and for generating self-employment.
- Organising Front Line Demonstrations (FLDs) on various crops to generate production data and feed back information.

To operationalise the mandated activities, broad objectives of KVKs are listed here:

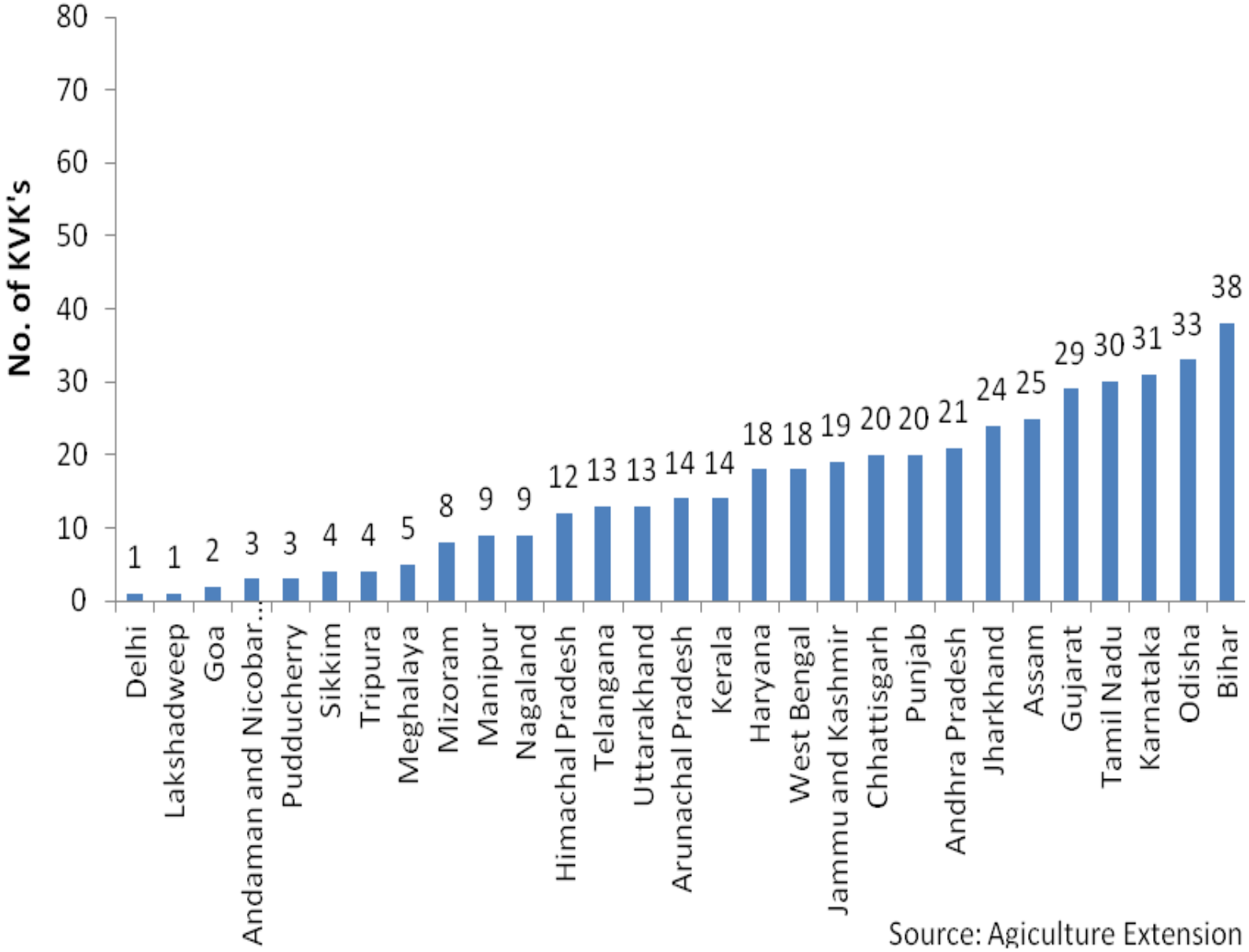
- To promptly demonstrate the latest agricultural technologies to the farmers as well as extension workers of the State Departments of Agriculture/ Horticulture/ Fishery/ Animal Science/NGOs with a view to reducing the time lag between the technology generation and its adoption.
- To test and verify the technologies under the socio-economic conditions of the farmers keeping in view the production constraints, and to modify the technologies to make them suitable.
- To impart training to the practicing farmers/farm women, rural youth and field level extension functionaries by following the methods of "Teaching by doing" and "Learning by doing".
- To back up with training and communication supports to the district level development departments viz. Agriculture/Horticulture/Fisheries/Animal science and NGOs in their extension programmes.

2.4 Impact of KVK System on the Overall Growth of Agricultural Sector: Some Empirical Research Evidences

2.4.1 Extension Services in India - A Glimpse

Several studies as well as statements emanating from the Government showed that the State Department of Agriculture is not able to fulfil the knowledge demand of the farmers. Country's five year plans emphasized the role of agricultural extension services in increasing agricultural growth pluralistic extension and also the need for strengthening in the

Figure 2.3: State/UT-Wise Distribution of KVKs in India: 2015



country. Thus, KVKs have become effective vehicles of transformation in achieving the desired effectiveness from extension services. A number of studies observed that extension services require a complete overhaul. The surveys indicate that 40 percent farmers had no access to any source of information on the new farming technology. Among the farmers who had accessed different sources of technology, 16 percent got it from progressive farmers and input dealers. The relevance of the information provided to the extension services was also in question. There are multiple sources of information flow to the farmers including progressive farmers, input dealers, print and electronic media and extension workers. The study by Adhiguru, Birthal, and Ganesh Kumar indicates that small farmers had to depend upon progressive farmers, input dealers and radio for information. Contact with extension workers for medium size and large scale farmers was almost double than that of small holding farmers. The works of Sulaiman et al. on agricultural extension suggest that extension services should be strengthened. A review of agricultural extension in India by Claire et al. (2010) brings out that extension services in India need to evolve to provide a diverse set of services and outreach to marginal and small farmers.

Extension services should respond to emerging issues in agriculture. The research by Venkatesh and Nithyashree (2014) examines the inputs used in agriculture and its accessibility. The results indicate that while input use had expanded in the second half of the 2000s, the role of private sector was more visible in supplying inputs like seeds, fertilizers and pesticides etc. The findings also suggest that inclusion of small and marginal farmers under institutional credit coverage and special attention to extension system to reach them are necessary.

2.4.2 Improved Extension Services - Significant Role played by KVKs

Although extension services are being offered by various agencies at local and district level, the emergence of KVK system has played a crucial role in institutionalizing the extension education and extension services in agricultural sector. The KVK has transformed the extension education system into a systematic, curriculum-based field by defining the competencies at micro-level.

There were many empirical evidences that KVK system has played a vital role through extension services in several areas such as (i) enhancing the yield of cereals and pulses during the past 4 decades, (ii) technology dissemination up to the last mile of farming, (iii) educating farmers in transformational technologies, (iv) acting as a link between technology, production and market information, (v) addressing the disadvantaged and dry-land farmers, (vi) building livestock extension systems, and (vii) reinforcing vocational systems etc. In addition, KVK has played a major role in (i) implementation and up-scaling of ICT Applications, (ii) building e-extensions, real-time solutions, (iii) linkages with local, state-level bodies, (iv) partnership and convergence, (v) massive scientist-farmer linkage etc.

2.6 A brief review of empirical evidences of research studies on KVK

i. FLDs and trainings by KVK in adopted villages (in Rajasthan): The change in the extent of adoption of new technological interventions increased up to 29.16 per cent in the case of HYVs, 29.13 per cent in balance dose of NPK, 21.87 per cent in seed treatment, 20.83 per cent in the use of zinc sulphate and 18.75 per cent increases in proper seed rate and use of insecticides (Asiwal et.at 2015).

ii. There are many areas to be tapped and channelized through KVK system. Most important among these is Knowledge Management at the KVK level and Public Private Partnership among stakeholders for enhanced synergy. As a follow-up to the first National Conference on KVK, the ICAR organized three national level trainings on knowledge management at the KVKs to sensitize the Subject Matter Specialists (SMSs) to work in a problem solving mode instead of subject of specialization mode. The KVKs have demonstrated their strength, quality and expertise and are in great demand, as the State Extension Services are not able to meet the knowledge demand of the farmers (Parshad, 2011).

iii. As a result of KVK intervention, increase in the yield of a HYV of paddy Pratikhya was 26.2% as compared to local variety. The B-C ratio of the paddy was found to be 1.85. The increase in the yield of Niger was found to be 32.43% as compared to local variety and B-C ratio of 1.4. 54.6% of increase in the yield was found to be in the case of turmeric production. Similarly, 41% increase in the yield was found in the case of ginger cultivation (Behera et.at 2014).

xiv. KVKs proved to be one of the knowledge hubs for farming community of Rural India through training, On Farm Trials, Frontline Demonstrations and Extension Activities as a mandate, are benefiting farmers in improving their knowledge. Regarding Knowledge level of Demo & Non-demo farmers of KVK on Paddy cultivation, it was observed that 97.33% of KVK demo-farmers are having good knowledge of paddy cultivation as compared to 87% among the non-demo farmers (Rao and Sridhar, 2014).

v. KVKs organized training of the tribal farmers as per the resources available. A study conducted on 240 tribal farmers and farm women who had undertaken training at KVK in the districts of Sundergarh, Keonjhar and Nuapada revealed that there was an overall increase of 36.82% in the knowledge level of sample farmers on various farm activities. However, the tribal farmers and farm women were still lacking adequate knowledge. More gaps were observed in farm forestry, fish farming, income generating activities, farm mechanisation, animal production and horticulture in comparison to crop production. Socio-economic attributes of the respondents did not have much influence on increasing their knowledge level (Rao and Sridhar, 2014).

vi. Study undertaken to measure the effectiveness of the training programmes of KVK, Thrissur, Kerala, India, on oyster mushroom cultivation showed that majority of the trainees felt that KVK officials and trainers were excellent in their work (98.3%) which reflected commitment of the KVK towards enhancing knowledge and skill of the farming community, more than three-fourths of the trainees started a mushroom cultivation unit (78.3%), more than half (53.33%) of the trainees had mushroom cultivation adoption indices of 71 to 90 (Sreevalsan et.al.)

vii. Another study conducted on operation of KVKs showed that 59 per cent of farmers adopted the recommendation of KVK at medium level, while the others were in low and high level (Kumbhare and Khonde, 2009).

viii. Impact study of KVKs on beneficiaries of Tamil Nadu and Puducherry by Subburaj, covering 6 KVKs and 3,000 beneficiaries showed that while services provided by KVKs were useful to the beneficiaries, there was a need for frequent visits by the KVK staff to the field level. About 16.8% beneficiaries stated that KVK staff needs up-gradation of their technical knowledge for providing guidance on various problems faced by the farmers.

ix. There are several empirical evidences that KVKs played a significant role in the overall development of agricultural sector. A latest field-based and extensive study conducted by NILERD has captured many facets of the development with the direct involvement of KVKs. Some of the areas of impact were (a) improved methods of farming and enhancing the income of small and medium farmers, (b) improved technologies, (c) organic farming, (d) resource conservation techniques for better yield, (e) extension services in all areas of farming, rural based non-farming, (f) diversification of agriculture, (g) dairy development and integrated farming (IAMR, 2015).

x. Various studies have brought out the evidences of efficient performance of the assigned roles by the KVKs. Agriculture being a highly dynamic process, there has to be a strong mechanism of technical back stopping to the KVKs and newer effective processes of reaching with richness.

With agriculture becoming more and more knowledge driven, it is necessary to reach the farmers with technologies which are location-specific, easy to adopt, socially compatible, and economically viable. The dissemination of agricultural information improves farm income. Therefore, it is only through a well structured science based institution that the country can look forward to achieving the evergreen revolution, and in turn, food and nutritional security. KVKs have played vibrant role in implementing the Central Government's newer initiatives like soil-health card, block demonstration for pulses and oilseeds, Sankalp se Siddhi, Swatchh Bharat Abhiyan, etc.

CHAPTER - III

SCOPE, COVERAGE, OBJECTIVES AND METHODOLOGY

3.1 Functional, Organisational and Operational Structure of KVKs

Ever since the establishment of the first KVK in 1974, the Indian Council of Agricultural Research (ICAR) under the Ministry of Agriculture & Farmers Welfare is solely responsible for establishment, supervision, monitoring and financing the Scheme of Krishi Vigyan Kendras (KVKs) in every district. ICAR assess the need for establishment of additional (2nd) KVK in select districts that are driven by rapid agricultural growth and also decides about the establishment of new KVKs in the newly carved districts at appropriate time.

At the apex level, the Agricultural Extension Division of ICAR looks after the KVK set-up. For administrative convenience, 11 Zones have been established throughout India, with each Zone covering at least one large State. The Director in each Zone regularly and directly monitors and supervises the KVKs falling under its jurisdiction. All the KVKs are located under various governance structures at local level and have been put under the direct administrative control of established authorities/management. The management includes (i) ICAR Research

Table 3.1: State-wise & Zone-wise Distribution of KVKs

Sl. No	States	No. of KVKs in the State Covered for Ranking	Total KVKs in the ATARI (Established up to 12th Five Year Plan)
1.	Himachal Pradesh	12	Ludhiana 61 KVKs
2.	Jammu & Kashmir	16	
3.	Punjab	20	
4.	Uttarakhand	13	
5.	Delhi	01	Jodhpur 61 KVKs
6.	Haryana	18	
7.	Rajasthan	42	
8.	Uttar Pradesh	68	Kanpur 68 KVKs
9.	Bihar	38	Patna 60 KVKs
10.	Jharkhand	22	
11.	Andaman & Nicobar Islands	03	Kolkata 53 KVKs
12.	Odisha	33	
13.	West Bengal	17	
14.	Assam	22	Guwahati 39 KVKs
15.	Arunachal Pradesh	13	
16.	Sikkim	04	
17.	Manipur	09	Barapani 35 KVKs
18.	Meghalaya	05	
19.	Mizoram	08	
20.	Nagaland	09	
21.	Tripura	04	
22.	Goa	02	Pune 74 KVKs
23.	Gujarat	28	
24.	Maharashtra	44	
25.	Chhattisgarh	20	Jabalpur 67 KVKs
26.	Madhya Pradesh	46	
27.	Andhra Pradesh	19	Hyderabad 67 KVKs
28.	Puducherry	02	
29.	Tamil Nadu	30	
30.	Telangana	13	
31.	Karnataka	30	Bengaluru 45 KVKs
32.	Kerala	14	
33.	Lakshadweep	0	
	National Level	**625**	**11 Zones 630* KVKs**

* 5 KVKs were left out due to some legal issues.

Institutes, (ii) State Agricultural Universities (SAUs/CAUs), (iii) Reputed NGOs devoted to the domain area of agricultural growth, (iv) State Government Departments, (v) Other Educational Institutions. The KVKs located in the respective campuses are governed by and under the administrative control of respective management such as ICAR Institute, SAU etc. At the second tier, ICAR monitors all the KVKs through the Zonal Offices called Agricultural Technology Application Research Institutes (ATARIs). The distribution of KVKs by State/Zone and number of KVKs falling under each State/Zone/ATARI are given in Table 3.1.

Each KVK is headed by Programme Coordinator who is the Head of the KVK and is supported by 6 Subject Matter Specialists (SMSs), one SMS in each disciplines of Agronomy, Plant Protection, Soil Sciences, Veterinary & Animal Sciences, Horticulture and Home Sciences. These SMSs are supported by technical, administrative and supporting personnel.

There is a huge infrastructural base for each KVK with 20 ha. of arable land to facilitate demonstration of all technologies, soil testing lab, building with facilities for conducting training and hostel accommodation for farmers, with a fleet of Vehicles/Jeeps, Tractors, Motorcycles, IT set-up, library, etc. Several Committees from time to time have given recommendations and guidelines on the overall functioning of KVKs and their improvements in areas such as (i) domain of mandated activities, (ii) coordination, implementation and monitoring, (iii) convergence and linkage, (iv) administrative/financial guidelines etc.

3.2 Need for the Present Study

It is apparent that KVKs have been making a huge impact on the farmers' practices and on the overall quality of life of farmers that includes their income. It was found in the earlier study conducted by NILERD during 2014-15 on the impact assessment of technologies disseminated by the KVKs that they are playing a crucial role as back stoppers to the farmers and are the only sources of technical/technological inputs at the field level.

Now, with the establishment of one KVK in each district (in some cases two KVKs in a district), it is pertinent to look at the qualitative & quantitative assessment of KVKs in order to make them more sustainable and to bring more effectiveness in them in the changing scenario of agricultural and rural economic activity of the country. In order to accelerate the growth of the agriculture sector there is a need for revival of the sector through seamless support to the rural households by several means, apart from technical support in agricultural activities. Some of the measures are: tapping the rural resources into economic activities which can boost employment, income and capacity building of rural youth, and creating subsistence avenues for women etc. KVKs can work as a repository of agriculture technology at district level to boost the desired level of technological assistance within location specific requirements.

The XI FYP document shows concern towards the problem of transfer of technology and knowledge at grassroot level and the challenges before the extension services. Further, it is recommended that the extension services be treated as an integral part of technology transfer. Thus, simultaneously, two wings of domain activities of KVK have come up, i.e. (i) production and dissemination of technologies through OFT/FLD etc., and (ii) diversified extension services to achieve outreach. The XII FYP Approach Paper too emphasizes the role of extension services that goes hand-in-hand along with the technologies that include farm mechanization.

The technology development and dissemination function of KVKs has to be understood from the tangible impact of such technologies with respect to each KVK and each district. Before realising this objective, the KVKs have to be assessed about for strengths, opportunities and weaknesses, if any, in a comprehensive manner. For this, there is a need to evaluate and rank the KVKs in totality of their working conditions.

Above challenges clearly indicate that there is a need for continuous tracking and monitoring of KVKs' activities in order to recognize the efforts of KVKs at grassroots level to suit the degenerating land-holding patterns and

worsening soil conditions. During 2014, a High Power Committee was set up by ICAR to look into all the aspects of KVK system. The Committee outlined a broad evaluation mechanism for performance tracking of the KVKs keeping in view all the parameters such as infrastructure, administrative, financial, human resources etc.

The present study on ranking of KVKs is the culmination of recommendations of the report submitted by the High Power Committee on Management of KVKs to ICAR.

3.3 Objectives of Study

Against the above background, it is decided to gauge the overall performance of the KVKs in a comprehensive manner with the following objectives:

i) To develop parameters for the evaluation of KVKs

ii) To classify KVKs for their performance into A, B, C and D categories on the basis of various parameters of performance

iii) To identify factors that facilitate/hamper the functioning of KVKs and means to upgrade them

The present study titled "Study on Ranking of KVKs" in A, B, C and D category is entrusted to NILERD (Autonomous body of NITI Aayog, Government of India) with the above objectives.

3.4 Approach and Methodology

A multi-pronged approach that includes the collection of primary data on census basis through mailed questionnaires to each KVK was adopted. The questionnaires were well-structured, close-ended in which data and information was elucidated comprehensively on each and every parameter in a measurable format, and explicit manner.

3.4.1 Scope, Coverage

As stated previously, the establishment of KVKs in each district is a continuous process directly linked to the re-organisation and carving of new districts. The year of establishment resembles the age of the KVK that is expected to have a bearing on its overall functioning. As such, the old KVKs are likely to have rich experience (as per the year of establishment) and possess fully developed infrastructure in all the forms – tangible impact of its technologies, extension activities etc. Significant number of KVKs were established in every FYP right from 1974. All these KVKs were classified according to their period of establishment as one of the parameters/criteria for determining their performance.

Therefore, there has to be a cut-off year that demarcates the young KVKs i.e. KVKs which were established in recent times and are still not having very good infrastructural facilities, human resources, financial resources etc. These KVKs for obvious reasons should not be clubbed with older KVKs while measuring the performance, as they pose the problem of parity. It was decided to exclude KVKs established after XII FYP from the present survey and assessment, as there is a gestation period for getting the desired output and results in a natural way.

Thus, the number of KVKs under the purview of the study was limited to the KVKs established up to the cut-off period of April 2012. All these KVKs are classified into different periods of establishment right from 1974 up to XII FYP (the last batch of KVKs established during April 2012). Therefore, the total number of KVKs was confined to 625 from the universe of 630 KVKs established till 12th FYP which has been taken for ranking.

Computerized data processing of responses of these 625 KVKs was done and they were classified into four categories i.e. A, B, C, and D (discussed in detail in the subsequent sections). As part of the methodology, it was decided to cross-check the ranks by visiting only a few selected KVKs out of the 625 KVKs. Thus, 2 KVKs

from 8 ATARIs (previously demarcated) were selected for field visits for the purpose (less no. of KVKs were visited in some zones as there were less than 2 or no KVKs in the respective category).

3.4.2 Conceptual Framework

Since KVKs are involved in a diverse range of activities including the spectrum of the mandated activities, the spin-off effects of these mandated activities in terms of impact on the overall agricultural practices in the district are increasing, hence it is imperative to identify and document all these activities in the performance framework. In other words, the expected results should show the strengths and weaknesses of each KVK, the environmental factors that are favourable to KVKs in general and the detrimental factors for a few KVKs that hamper their performance, and all this has to be documented in a systematic and rational manner. Thus, at the outset, it was decided to group all KVKs into four categories i.e. A, B, C, and D based on their performance. In order to find out the extent to which KVKs are performing their mandated activities, it was decided in consultation with ICAR to have a comprehensive methodological framework to capture the outcomes and performance indicators of KVK in a transparent manner in order to categorize the KVKs into the above four categories of performance. The weightage to be accorded to different parameters was also finalised with due deliberation with the ICAR.

3.4.3 Reference Period of Data Collection

Categorization of KVKs into A, B, C, and D grade as per their performance and achievements over the years was the main task of the present study. The performance was designed to be captured in terms of cumulative factors over a period of preceding five financial years starting from 2012-13 to 2016-17. All the performance variables considered in categorization of KVKs were cumulatively treated accordingly.

3.4.4 Segmentation of Mandated Activities

In order to assess the mandated activities in a comprehensive and rational manner, the mandated activities were broadly classified into four categories of core activities with allocation of weightage to each core activity. These core activities were identified in accordance with the Vision, Mission, Mandated Activities and the current responsibilities assigned at local level in association with the line departments. In addition to mandated activities, the status and strengths of Infrastructural facilities and Manpower were also considered as significant factors which affect the delivery mechanism of KVKs. The list of parameters and the weights assigned is as below:

	Sement of Parameters	Weightage (%)
1.	Infrastructure & Manpower (Total of 12 parameters)	15
2.	Technology Assessment, Dissemination and Training (Total of 11 parameters)	35
3.	Effect/Impact of KVK's Mandated Activities (Total of 12 parameters)	30
4.	Allied Activities & Accolades (Total of 13 parameters)	20

Thus, every KVK is intended to be measured with the maximum weight of 100 considering all the broad spectrum of activities falling within the range of components 1 to 4 (48 parameters).

Under each of the above sections, again, a detailed segmentation of each Section/Core Activity was done and split into several measurable parameters after due deliberation with stakeholders . Each parameter was assigned a weightage/points/marks within the earmarked maximum marks. The detailed list of such parameters, marks under each section is given in Table (3.2).

Two-phase approach was designed to bring all KVKs into the performance analysis within the framework of above parameters, and weights were assigned to them.

Table 3.2: Parameters and Assigned Weightage

Section I - Infrastructure & Manpower	Weightage 15
Number of SMSs in KVK	0.5
Technical Staff	0.5
Non-Technical Staff	0.5
Regular Staff	0.5
Office Building	1.0
Laboratories	1.0
Demonstration Units	2.0
Farmer's Hostel	1.0
ICT & Internet Facility	1.0
Office equipments	1.0
Situation of Revolving Fund	3.0
Financial Support received from Other Sources (like Sponsored Projects etc.)	3.0
Sub-Total	15
Section II - Technology Assessment, Dissemination and Training	**Weightage 35**
A. OFT	10
No. of Trials during the last five years	6.0
No. of Farmers involved in OFT	4.0
B. FLD	12
No. of Demonstrations during the last five years	8.0
No. of OFTs converted into FLDs	4.0
C.Training	13
Farmer's training programme organized	3.0
No. of farmers participated in the training	2.0
Participation of youths in training programmes	3.0
SC/ST Trainees participating in training programmes	0.5
Women participation in training programmes	1.0
Sponsored training programme organised	1.0
Percentage of trainees who started own enterprises	2.5
Sub Total	35
Section III - Effect of KVK's Mandated Activities	**Weightage 30**
No. of problems identified	4.0
Percentage of OFT designed in relation to identified problems	5.0
Percentage of problems identified, solved	5.0
Establishment of minimal processing and value addition units in the district	1.0
No. of OFT feedback conveyed to Research Institutions	2.0
Increase in Area coverage under crop after FLDs	3.0
Farm Machineries, Implements & Tools displayed, adopted by the farmers	2.0
Productivity of Non-crop after FLD	3.0
No. of farmers visiting KVK	1.0
No. of soil samples analyzed	2.0
Production of seed/bio-fertilizer/saplings	1.0
Production of livestock/fingerlings/poultry	1.0
Sub Total	30
Section IV - Allied Activities & Accolades	**Weightage 20**
Database available with KVK	1.0
Sponsored research projects undertaken	2.0
Exposure visit for farmers	2.0
Agriculture camps/Animal Camps/Kisan Melas/Field Days/Kisan Gosthis	2.0
SMSs' visit to farmer's field	1.0
Exhibitions organized	1.0
Television/Radio Talk	1.0
No. of Phone calls received related to agricultural problems	2.0
Collaboration with other Organization	1.0
Publications and Case Studies including success stories	1.0
Awards and Recognition to KVK	2.0
Awards and Recognition to KVK SMSs	2.0
Awards and Recognition to Farmers as a result of KVK linkage	2.0
Sub Total	20
GRAND TOTAL (I+II+III+IV)	**100**

Prior to launching of the study after finalisation of questionnaire, pre-testing of the questionnaire was done in three different KVKs located in different districts by the research team from NILERD. Apart from getting the questionnaires filled-in, the research team discussed the whole gamut of issues surrounding the KVKs with the PCs , SMSs, farmers, women, youth in the rural areas in order to get a complete picture of the KVK system and its impact. Based on the experiences during the pre-testing, the questionnaire was modified and finalized after discussion with Core Team of ICAR for further inputs prior to the nation-wide launching of the survey, targeting the 625 KVKs.

3.4.5 Process of Ranking the KVKs

As per the above classification of all the activities of KVK, the ranking was done under four categories considering the following parameters:

a. Overall Ranking of KVKs (considering all the parameters collectively as stated at table 3.2) and assigning the maximum weight of 100

b. Ranking of KVKs exclusively under Infrastructure Status and assigning only 15 % weightage

c. Ranking of KVKs purely based on Technology Assessment, Dissemination (Section-II of table 3.2) and assigning the maximum of 35 % weightage.

d. Ranking of Impact of KVKs' Mandated Activities with a maximum weightage of 30 %

e. Allied Activities & Accolades was assigned 20 % weightage.

3.4.6 Index for Ranking

The points obtained on the above categories were normalized by preparing an index for ranking of KVKs on the basis of indicators/weights obtained.

The formula for preparing the index used was as follows:

Ax = (Actual Value) – (Minimum Value)

Bx = (Maximum Value) – (Minimum Value)

Index Ix (of a particular KVK) = Ax/Bx

All the absolute values obtained were converted into relative values with the help of above normalization of values for each KVK. Thus, all the KVKs were brought into a uniform framework of relative performances ranging from 0 to 1.0.

An index for each KVK has been prepared for its ranking based on the data received from filled-in questionnaires. Thus, all KVKs have been categorized into A, B, C and D grade on the basis of this index and points obtained. Further, the KVKs were grouped into four categories in accordance with the range of scores for each category. The ranges of marks under each category are illustrated below:

The KVKs getting up to 0.25 score out of 1.0 would be categorized as D. Similarly, KVKs getting a score ranging from 0.26 to 0.50 would be categorized as C, a score between 0.51 to 0.75 as B and a score ranging between 0.76 and above would be categorized as A.

3.4.7 Study of Inter-relationship among broad variables

After obtaining the All-India ranking of KVKs, these ranks were segmented as a function of implicit variables like (i) Infrastructure, (ii) Mandated Activities, (iii) Impact of Mandated Activities. Further, the Rankings under each category were correlated with the explanatory functions like (a) Period of Establishment (in other words,

age of KVK), (b) Type of Management (ICAR/SAU/NGO/State Depts./Other Institutions), (c) Zone/ATARI-wise comparison of KVKs grading.

The study data was analysed using statistical techniques like Regression Analysis, Coefficients, Skewness, Kurtosis and Multi-Co-linearity among variables to see the significance of deviation and interdependences of the above cited factors.

3.4.8 Field Survey: Cross-checking of responses and capturing the views of stakeholders

In the second phase (after getting the responses from all the 625 KVKs), the responses were processed, and marks/points were drawn out from the programmed output of each KVK (details are given in the following section). Thus, based on the points obtained by each KVK, they were categorised into four categories (A,B,C,D). It was decided to visit two KVKs under each category of ranking, and in each of the previously formed 8 ATARIs. Therefore, in all, 61 KVKs were identified and visited for thorough examination of the performance vis-a-vis roles and responsibilities and to capture the quantitative information by way of brainstorming with stakeholders at field level. Since the evaluation is for the KVKs establishemtned up to Twelfth Five Year Plan, the study is concerned with 8 ATARIs.

Surveys

Mailed questionnaire method was adopted to collect primary data from the targeted KVKs. All the responses received from KVKs were routed through the respective ATARIs in their Zonal Jurisdiction. Physical verification and cross-checking of data received from KVKs randomly selected under all the categories (A, B, C, D) is done by the Research team of NILERD. In each category and from each of the 8 Zones (as per the earlier Zonal classification, two KVKs were selected for field visit by the NILERD team). The field reports of such visits are also part of the ranking study which is presented in the report.

Focus Group Discussions (FGDs)

Focus Group Discussions (FGDs) were organized through a comprehensive system of brainstorming to gather qualitative information on a variety of issues relevant for ranking of KVKs. The institute faculty visited ATARIs and KVKs to hold discussions with different stakeholders in the selected Districts in order to substantiate the quantitative data and information submitted by KVKs. These FGDs were organized in different parts of the country to generate a representative cross-section of opinions. The areas for discussions in FGDs were identified in advance in consultation with experts and other stakeholders.

Key Informants

In the first phase of the field visit interaction with officials of 11 ATARIs was held and the scores of KVKs falling under their respective jurisdiction were discussed. Heads of KVKs including Subject Matter Specialists with extensive knowledge in the field were consulted to obtain their views regarding the functioning of their KVKs. Weights have been assigned to different indicators after getting those vetted by the experts in ATARIs.

Quantitative and qualitative inputs were obtained from the farmers, especially progressive farmers, extension officers, and entrepreneurs who received training in KVKs.

CHAPTER IV

RANKING OF KVKS: AN IN-DEPTH ANALYSIS

4.1 Introduction

The main role of Krishi Vigyan Kendras (KVK) is to undertake a large number of indispensable programmes to meet the demand for technology assessment and transfer across the country. In addition, this science-based institution is an important feedback loop for the National Agricultural Research System (NARS) for appropriate refinements in the agricultural technology products and services to facilitate large scale adoption, and in turn, enhance income per unit of area and time along with capacity building of stakeholders.

The growth in agriculture depends on effective dissemination of new agricultural technology among the farmers. Thus, a KVK performs diverse roles such as (i) On-farm Trials (OFT), (ii) Front-line Demonstrations (FLD), (iii) Vocational training of farmers including women farmers and rural youths and (iv) In-service training of State Departments of Agriculture personnel in cutting-edge technology and extension models among many other functions. Significant roles of KVK are through extension services. This is unanimously accepted that success of any extension education activity depends on the ability and expertise of the extension staff to deliver the message appropriately for credible flow of information to the clientele at the right time in most appropriate manner.

KVKs are spread in each district, (in some cases, more than one KVKs are in one district). There were 630[1] KVKs by the end of XI Five Year Plan out of which 625 KVKs were covered in the present study. The very first KVK being established during 1974. All these KVKs are functioning within the vision, mission, and mandated activities oriented from time to time as per the recommendations of High-Powered Committees and brain-storming sessions. The KVKs are functioning under the overall control, guidance, and supervision of ICAR in 11 Zones, each Zone having an Agricultural Technology Application Research Institute (ATARI) for smooth governance of the whole network of KVKs.

4.2 Genesis and Need for Ranking

Due to strategic and logistic reasons, for better effectiveness of the KVK system, these KVKs are put under the administrative control of five types of local managements at districts/state level, such as:

(i) ICAR Institutions

(ii) State Agricultural Universities/Central Agricultural Universities

(iii) NGOs

(iv) State Governments

(v) Public Sector Undertakings, and

(vi) Other Educational Institutions

KVKs are being established in a phased manner since Vth Five Year Plan as illustrated in the previous chapters. All these KVKs have attained the minimum required gestation period for delivery of services.

[1] Currently there are 677 KVKs throughout India. The cut-off figure is taken till the end of XI FYP for the present study. Formation of new district(s) in each State being a dynamic process, there is a huge demand for setting up of KVK in the newly formed districts after bifurcation of earlier districts.

Year of establishment of KVKs in all likelihood puts them in an advantageous position due to obvious factors as they get fully equipped in terms of infrastructure, including manpower overtime. The infrastructural framework of KVK has spin-off effect on other aspects, such as core/mandated activities. These mandated activities in return impact on the outcome of the services and the overall quality of life of the farmers. Long-term impact in the form of outcomes can be measured by varied parameters like (a) income, (b) yield/productivity, (c) optimization of resources, (d) improvement in soil-health, (e) utilization of bio-resources/bio-wastes, (f) on-farm water use efficiency (g) value addition, (h) increased cropping intensity, (i) crop diversification, (j) technology matrices' choices for diverse agro-climatic conditions, (k) coping strategies due to impending climate change etc.

Gradually, these KVKs have redefined their roles and took up the challenges of agriculture sector to mitigate the sufferings of farming community at grass-roots level. Some of them are (i) establishing huge network of extension education activities, (ii) conceiving, designing, and organizing vocational training/entrepreneurial training aiming at rural youth, women folks, SC, ST, and OBC population, and (iii) sensitizing rural population towards off-farm-rural activities for income augmentation, etc. Therefore, the overall functioning of KVKs can be looked into four segments[2], (i) Infrastructural base of KVK, (ii) Mandated Activities, (iii) Impact of Mandated Activities, and (iv) Auxiliary Activities and Accolades.

However, KVKs are having a wide variation in all the above segments. Several reasons for non-uniformity and non-conformity in their performances and efficiencies have been observed in this study like location, management, financial support, manpower, infrastructure, transport, agro-climatic conditions, stakeholders resource-endowments etc. In the present study, all the KVKs were evaluated and ranked on the basis of the following implicit parameters, and their weights in parenthesis:

a. Infrastructural set-up of KVK (15%)

b. Mandated Activities (35%)

c. Impact of Mandated activities (30%)

d. Allied activities and accolades (20%)

Further, all the above implicit parameters are linked to the following explicit factors.

a. Type of Management Control (eg. ICAR, SAU, NGO, etc)

b. Period of Establishment (year of establishment of KVK)

Against this background, it needs a critical analysis to examine the performance of each KVK vis-à-vis (i) Strengths, (ii) Weaknesses, (iii) Opportunities, and (iv) Associated threats. Therefore, gauging of performance of KVKs has to be viewed in a holistic and comprehensive manner looking into various aspects such as implicit advantages, natural constraints associated with each of these KVKs due to diverse conditions prevailing in delivery mechanism and in diverse agro-climatic conditions, etc. There are also wide ranging district variations in terms of agrarian conditions driving the growth engines of district from a developed district to a remote, hilly and arid districts spreading across the country.

Therefore, it is logical and rational to look at KVKs in terms of not just overall performance, and not in absolute marks/points, but to put them in relative terms by considering major external and internal variables affecting their overall functioning. It is an obvious fact that the location and management have a bearing on the infrastructural set-up in addition to varied logistics across the managements, the overall explicit factors of performance

[2] As discussed in the preceding Chapter-III: Methodology of Ranking of KVKs, all the above 4 categories are further split into several parameters for gauging and quantitative measurement purposes.

per se cannot give the overall picture of effectiveness. Therefore, the outcome of each KVK has to be linked to many embedded and inherent variables.

Due to all these factors, the present study was commissioned by the Agricultural Extension Division of ICAR with a specific objective of ranking the established KVKs under four ranks-A,B,C, and D, based on their performance and capturing of their performances on various aspects, at micro and macro level and transforming all these outcomes into quantitative data to compare all KVKs across the country.

The present study was conducted covering all KVKs which were established till end of XI Five Year Plan. A structured questionnaire was mailed to all 630 KVKs through concerned ATARIs. 625 KVKs out of 630[3] KVKs were considered for analysis. In this Chapter the results of the Ranking of KVKs in to four above mentioned categories is presented on the basis of following four indicators, namely;

4.2.1 Criteria of Overall Performance Ranking:

100% weights was assgned to this ranking after considering the weights of all the four implicit parameters, i.e, (i) infrastructure (15%), (ii) mandated activities (35%), (iii) impact of mandated activities (30%), and (iv) allied activities & accolades (20%). Table 4.1 is a glimpse of all-India status of ranks.

In addition to 85% weight are given to this ranking after considering the weights of mandated activities, impact of mandated activities, and allied activities & accolades.

Table 4.1 Ranking at Glance

ATARI	KVKs as per Ranking (Number)												Total KVKs
	Infrastructure (15 % Weightage)				Core activities (85 % Weightage)				Overall Performance (100 % Weightage)				
	A	B	C	D	A	B	C	D	A	B	C	D	
Ludhiana	21	21	12	07	28	30	03	-	31	25	05	-	61
Jodhpur	07	28	17	09	09	28	21	03	11	27	18	05	61
Kanpur	09	24	24	11	31	32	04	01	27	34	06	01	68
Patna	08	32	16	04	29	29	02	-	25	33	02	-	60
Kolkata	08	14	25	06	34	17	02	-	32	16	05	-	53
Guwahati	01	09	18	11	14	23	02	-	05	31	03	-	39
Barapani	-	11	16	08	23	12	-	-	16	19	-	-	35
Pune	21	35	18	-	32	37	04	01	30	40	03	01	74
Jabalpur	07	38	19	02	48	18	-	-	41	25	-	-	66
Hyderabad	16	27	20	01	27	30	07	-	26	30	08	-	64
Bengaluru	17	22	05	-	19	25	-	-	22	22	-	-	44
All India	**115**	**261**	**190**	**59**	**294**	**281**	**45**	**05**	**266**	**302**	**50**	**07**	**625**

4.2.2 Performance Ranking of Core Activities:

Separate rankings for each of the implicit parameters are also worked out, as stated below with weights in parenthesis.

1. Ranking of Infrastructural set-up (15%):
2. Ranking of Mandated Activities (35%):
3. Ranking of Impact of Mandated Activities (30%):
4. Ranking of Allied Activities & Accolades (20%)

[3] Out of 630 KVKs established till the end of XI FYP, the data was analyzed for only 625 as the remaining five KVKs have sub-judice issues, thus kept out of the present study.

Further, above rankings were correlated with respect to the external factors such as (a) type of management, and (b) period of establishment. The ranking was done on the basis of normalized values within the range of "0" to "1" after converting absolute points into relative points with reference values of maximum and minimum score fixed[4]. Data collected from all 625 KVKs was processed and the results are reported in the following pages.

4.3 Summary of Ranking of KVKs:

4.3.1 Overall Performance Ranking:

The following table 4.2 gives the categorization of KVKs into A,B,C,D ranks. It was noteworthy that 91% of the total KVKs got "A" and "B" in overall performance ranking and only a miniscule of KVKs were in "C" and "D" ranks (9%).

4.3.2 Ranking of Core Activities Performance:

In this case again, the KVKs have shown commendable performance. 92% of the KVKs occupied "A" and "B" ranks, with meager 8% of KVKs falling in "C" and D" category.

4.3.3 Ranking Based on Infrastructure:

As per infrastructure including manpower, there was a wide variation while 60% of KVKs were in A and B ranking together, 30% and 10% were in C & D ranking respectively. Precisely, 18% and 42% of the KVKs are falling in A and B Ranks respectively. Almost one-third of the KVKs are in C-category giving an indication that these KVKs have to be strengthened in terms of infrastructure. The small proportion (10%) of KVKs are falling in D category. They also need to be examined and a review may take place in their case.

Table-4.2: Summary of Ranks Obtained by KVKs in Different Categories (%)

Sl. No.	Type of Ranking	No. of KVKs (% of KVKs)			
		A	B	C	D
1	Overall Performance	266(43)	302(48)	50(8)	7(1)
2	Core Activities(Include Mandated +Impact +Allied Activities)	294(47)	281(45)	45(7)	5(1)
3	Infrastructure	115(18)	261(42)	190(30)	59(10)
4	Mandated Activities	386(62)	187(30)	45(7)	7(1)
5	Impact of Mandated Activities	312(50)	240(39)	64(10)	9(1)
6	Allied Activities & Accolades	164(26)	319(51)	118(19)	24(4)

Note: i) All percentages are rounded-off, ii) Percentages are given in parenthesis

4.3.4 Ranking of Mandated Activities:

It is laudable to record that nearly one-third of the KVKs are delivering their mandated activities with full potential, and they occupy "A" category. Another one-third are placed in "B" category. Only a fraction (8%) of the KVKs are falling in C&D categories put together. Here again, the KVKs purely in "D" category are quite negligible with just 1% of their share.

4.3.5 Ranking of Impact of Mandated Activities:

Here again, half of the total KVKs have occupied "A" category, and another 39% are placed in "B" category. Majority of the KVKs in B ranking are in the upper margin and in the peripheral region close to "A" category.

4.3.6 Ranking of Allied Activities & Accolades:

In this case, the trends are somewhat deviating, with just one-fourth of the KVKs gaining place under "A" category. More than half of the KVKs are falling in "B" category. The activities taken into consideration in this

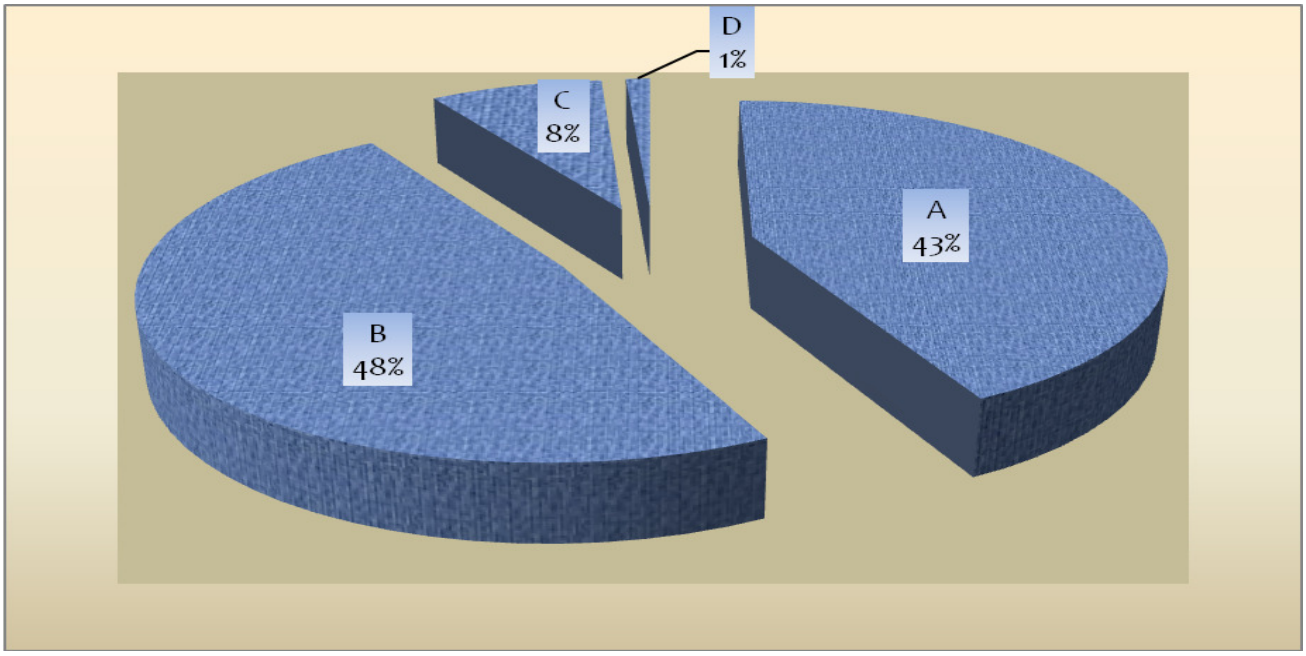
[4] Details of weights/measurement of points, and ranking procedure is reported in the Chapter-III: Methodology

rankings are all miscellaneous activities, like effective use of Information & Communication Technology (ICT), innovative channels for dissemination of information, academic & research contributions and publications of SMS etc.

4.4 Overall Performance Ranking: Detailed Analysis

The following paragraph highlights the overall performance ranking of KVKs while adding all indicators together.

Figure 4.1 Overall Ranking of KVKs



Distribution of KVKs in different ranks as mentioned in the above table 4.2 is closely examined and disintegrated in terms of ATARI-wise analysis, inter-state variations, type of management, and period of establishment to explore for any inferences.

The following table 4.3 gives the ATARI wise overall ranking of KVKs across the country.

Table 4.3: Overall Ranking of KVKs by ATARI (%)

Sl. No.	Name of ATARI	Category of Rank			
		A	B	C	D
1	Ludhiana	51	41	8	0
2	Jodhpur	18	44	30	8
3	Kanpur	40	50	9	1
4	Patna	42	55	3	0
5	Kolkata	60	30	9	0
6	Guwahati	46	54	0	0
7	Barapani	13	79	8	0
8	Pune	41	54	4	1
9	Jabalpur	62	38	0	0
10	Hyderabad	41	47	13	0
11	Bengaluru	50	50	0	0
	All India	**43**	**48**	**8**	**1**

Note: All percentages are rounded-off

It is seen from above table that all the ATARIs are showing good performance in terms of manning the KVKs under their jurisdiction. The ranking figure of all ATARIs is in conformity with the national averages in all the ranks. There are few exceptions like Barapani which is located in remote area of North Eastern Region.

Following table 4.4 highlights the overall ranking of KVKs by type of management:

Table 4.4: Overall Rank of KVKs by Type of Management (%)

KVKs by Type of Management	Category of Rank			
	A	B	C	D
ICAR	42	48	10	0
State Government	27	61	12	0
SAU	40	49	9	2
NGO	59	38	3	0
Other Educational Institutions	42	58	0	0
PSU	33	67	0	0
Total	**43**	**48**	**8**	**1**

Note: All percentages are rounded-off

It is seen from the above table that highest proportion of KVKs under NGOs have registered "A" Ranking followed by ICAR, SAUs, Other Educational Institutions and PSUs. It is notable to recognize that KVKs falling in "D" category are almost nil indicating a positive signal that all the KVKs are governed with utmost efficacy by the controlling authorities irrespective of type of management. Only the KVKs governed by State Departments are showing weak signs, i.e., less number of KVKs have obtained the rank of "A", and maximum KVKs under "C" category are from State Departments. This situation may be reviewed in such cases by ICAR, which is the funding and apex controlling agency of all KVKs.

The following table 4.5 presents the overall ranking of KVKs by their Period establishment.

Table 4.5 Overall Ranking of KVKs by Period of Establishment (%)

Year of Establishment	Category of Rank				
	A	B	C	D	Total
1974 - 79	55	45	0	0	100
1980 - 84	55	40	5	0	100
1985 - 89	35	50	12	4	100
1990 - 94	50	43	7	1	100
1995 - 99	49	42	9	0	100
2000 - 04	44	53	2	1	100
2005 - 09	43	51	6	0	100
2010 - 12	15	51	29	4	100
Total	**43**	**48**	**8**	**1**	**100**

Note: All percentages are rounded-off

A higher proportion of KVKs have represented A & B ranking so far as the age of the KVKs is concerned. It is seen from the above table that comparatively older KVKs have secured A or B position in overall ranking. It is also revealed from the above table that 29% of KVKs have registered C Ranking which were set up during 2010-12. This may be due to some gestation period for such KVKs to cope up fully to provide tangible outcomes. The table below 4.6 represents inter-state variations in the overall performance ranking of KVKs across the country. The outcomes of rankings of all the states are in synchrony with the all-India averages except few states which are hilly, arid, sea-locked and with isolated terrains.

Table 4.6: Percentage Distribution of Overall Rank of KVKs by State

All India/ATARI	Name of the State	Ranks				
		A	B	C	D	Total (%)
Zone – I Ludhiana	Himachal Pradesh	42	58	0	0	100
	Jammu and Kashmir	31	56	13	0	100
	Punjab	75	15	10	0	100
	Uttarakhand	46	46	8	0	100

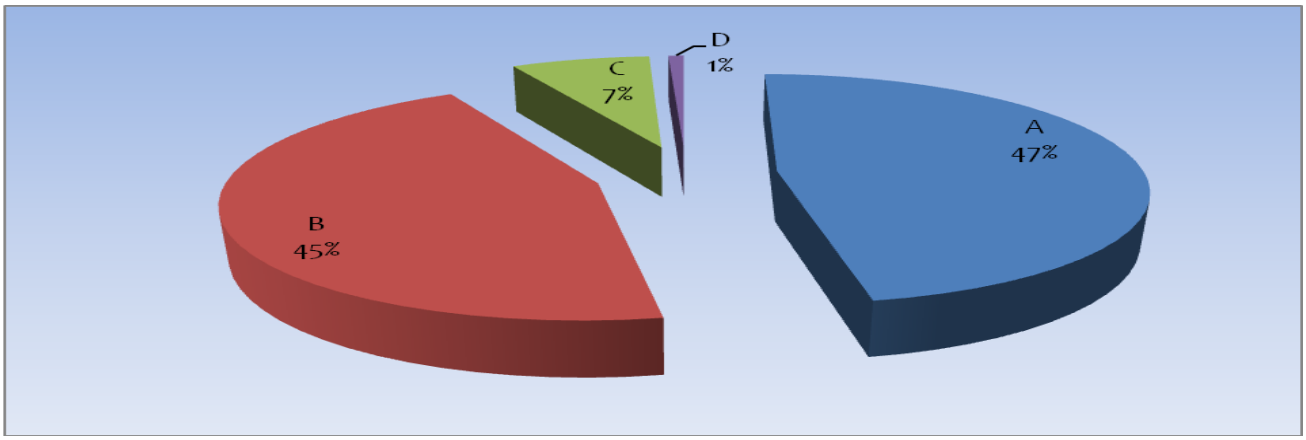
Zone – II Jodhpur	Delhi	0	100	0	0	100
	Haryana	39	56	0	6	100
	Rajasthan	10	38	43	10	100
Zone – III Kanpur	Uttar Pradesh	40	50	9	1	100
Zone – IV Patna	Bihar	47	50	3	0	100
	Jharkhand	32	64	5	0	100
Zone – V Kolkata	Andaman and Nicobar Islands	33	0	67	0	100
	Odisha	52	39	9	0	100
	West Bengal	82	18	0	0	100
Zone – VI Guwahati	Assam	14	82	5	0	100
	Arunachal Pradesh	8	77	15	0	100
	Sikkim	25	75	0	0	100
Zone – VII Barapani	Manipur	22	78	0	0	100
	Meghalaya	40	60	0	0	100
	Mizoram	63	38	0	0	100
	Nagaland	44	56	0	0	100
	Tripura	75	25	0	0	100
Zone – VIII Pune	Goa	0	50	50	0	100
	Gujarat	29	68	4	0	100
	Maharashtra	50	45	2	2	100
Zone – IX Jabalpur	Chhattisgarh	50	50	0	0	100
	Madhya Pradesh	67	33	0	0	100
Zone – X Hyderabad	Andhra Pradesh	30	55	15	0	100
	Puducherry	0	50	50	0	100
	Tamil Nadu	45	48	7	0	100
	Telangana	54	31	15	0	100
Zone – XI Bengaluru	Karnataka	53	47	0	0	100
	Kerala	43	57	0	0	100
	Total	**43**	**48**	**8**	**1**	**100**

Note: All percentages are rounded-off

4.5 Ranking of KVKs by Core Activities

Detailed analysis of the KVKs vis-à-vis the performance in core activities is analysed, and the results are presented in the following tables. 92% of KVKs are showing outstanding performance by scoring "A" & "B" ranks put together. Further analyses in terms of inter-state variations, type of management, period of establishment, and ATARI-wise variations are captured in the following tables. The performance indicator under this category of Core Activities is crucial since 85% of the weightage is given to this ranking as illustrated in the preceding pages.

Figure 4.2 Ranking of KVKs by Performance (Mandated and Non- Mandated Activities)



ICAR and NGOs are at the top with the KVKs under their governance at local level showing very good performance and 60% and 63% of KVKs respectively are in "A" category. KVKs falling under the governance of State Departments, are unevenly distributed compared to their counterparts in other types of Management, as illustrated in table 4.7.

Table 4.7 Ranking of KVKs by Core Activities and Type of Management (%)

KVKs by Type of Management	Category of Rank				
	A	B	C	D	Total
ICAR	31(60)	17(33)	4(8)	nil	52
Government	14(42)	16(48)	3(9)	nil	33
SAU	183(43)	207(48)	34(8)	5(1)	429
NGO	60(63)	32(33)	4(4)	nil	96
Other Educational Institutions	6(50)	6(50)	nil	nil	12
PSU	nil	3(100)	nil	nil	3
Total	**294(47)**	**281(45)**	**45(7)**	**5(1)**	**625**

Note: All percentages are rounded-off

Similarly, in case of period of establishment, across all the time zones spanning 4 decades, there are no contrasting results in the performance under core activities. The older KVKs, established in previous FYP periods did not show any better signs compared to latest KVKs. On the other hand, the KVKs established during 2000-4 & 2005-09 have shown marked improvements and more than 50% of KVKs gained place in "A" ranking. This shows that though there is some gestation period to fully gear-up in delivering services at full scale, all the KVKs are delivering goods at par irrespective of their age after some time. The details are shown in table 4.8.

Table 4.8 Ranking of KVKs by Core Activities and by Period of Establishment

Period of Establishment	Category of Rank				
	A	B	C	D	Total
1974 - 79	18 (62)	11 (38)	-	-	29 (100)
1980 – 84	23 (58)	15 (38)	2 (5)	-	40 (100)
1985 - 89	8 (31)	14 54)	3 (12)	1 (4)	26 (100)
1990 - 94	49 (48)	46 (45)	7 (7)	1 (1)	103 (100)
1995 - 99	24 (56)	15 (35)	4 (9)	-	43 (100)
2000 - 04	76 (48)	77 (49)	3 (2)	2 (1)	158 (100)
2005 - 09	79 (51)	69 (45)	6 (4)	-	154 (100)
2010 - 12	17 (24)	34 (47)	20 (28)	1 (1)	72 (100)
Total	**294 (47)**	**281 (45)**	**45 (7)**	**5 (1)**	**625 (100)**

Note: Figures in parenthesis are % to total, All percentages are rounded-off

While comparing the performance of KVKs by each ATARI, it was found that the outcome figures are very much in line with the national figures. The details are given in table 4.9.

Table 4.9 Performances in Core Activities by ATARI

Name of ATARI	No. of KVKs as per the Rank				
	A	B	C	D	Total
1. Ludhiana	28 (46)	30 (49)	03 (5)	-	61 (100)
2. Jodhpur	09 (15)	28 (46)	21 (34)	03 (5)	61 (100)
3. Kanpur	31 (46)	32 (47)	04 (6)	01 (1)	68 (100)
4. Patna	29 (48)	29 (48)	02 (3)	-	60 (100)
5. Kolkata	34 (64)	17 (32)	02 (4)	-	53 (100)
6. Guwahati	14 (36)	23 (59)	02 (5)	-	39 (100)
7. Barapani	23 (66)	12 (34)	-	-	35 (100)
8. Pune	32 (43)	37 (50)	04 (5)	01 (1)	74 (100)
9. Jabalpur	48 (73)	18 (27)	-	-	66 (100)
10. Hyderabad	27 (42)	30 (47)	07 (11)	-	64 (100)
11. Bengaluru	19 (43)	25 (57)	-	-	44 (100)
All India	**294 (47)**	**281 (45)**	**45 (7)**	**5 (1)**	**625 (100)**

Note: All figures in parenthesis are % ages and all percentages are rounded-off

Inter-state variations of KVKs in the performance under core activities are given in table 4.10. Here, there are wide variations in the distribution of KVKs according to their ranks. This variation can be judged by the similar kind of geo-climatic and agrarian diversities associated with every state in India.

Table 4.10 State - wise Ranking of KVKs by Core Activities

Sl. No.	State	No. of KVKs as per Rank Category				
		A	B	C	D	Total
1.	Andaman & Nicobar Islands	1	1	1	-	03
2.	Andhra Pradesh	8	9	3	-	20
3.	Arunachal Pradesh	5	7	1	-	13
4.	Assam	8	13	1	-	22
5.	Bihar	19	18	1	-	38
6.	Chhattisgarh	12	8	-	-	20
7.	Delhi	-	1	-	-	01
8.	Goa	-	1	1	-	02
9.	Gujarat	8	19	1	-	28
10.	Haryana	6	11	-	1	18
11.	Himachal Pradesh	5	7	-	-	12
12.	Jammu & Kashmir	4	10	2	-	16
13.	Jharkhand	10	11	1	-	22
14.	Karnataka	13	17	-	-	30
15.	Kerala	6	8	-	-	14
16.	Madhya Pradesh	36	10	-	-	46
17.	Maharashtra	24	17	2	1	44
18.	Manipur	7	2	-	-	09
19.	Meghalaya	4	1	-	-	05
20.	Mizoram	5	3	-	-	08
21.	Nagaland	4	5	-	-	09
22.	Odisha	21	11	1	-	33
23.	Puducherry	-	1	1	-	02
24.	Punjab	12	7	1	-	20
25.	Rajasthan	3	16	21	2	42
26.	Sikkim	1	3	-	-	04
27.	Tamil Nadu	12	16	1	-	29
28.	Telangana	7	4	2	-	13
29.	Tripura	3	1	-	-	04
30.	Uttar Pradesh	31	32	4	1	68
31.	Uttarakhand	7	6	-	-	13
32.	West Bengal	12	5	-	-	17
	All India	**294**	**281**	**45**	**5**	**625**

4.6 Ranking of KVKs by Availability of Infrastructure

Further analysis of all-India ranks by splitting all 625 KVKs into the (i) 11 Zones (11 ATARIs), (ii) type of management, (iii) state-wise arrangement, and (iv) period of establishment are shown in figure 4.3 & Tables 4.11.

Figure 4.3 Ranking of KVK by Availability of Infrastructure

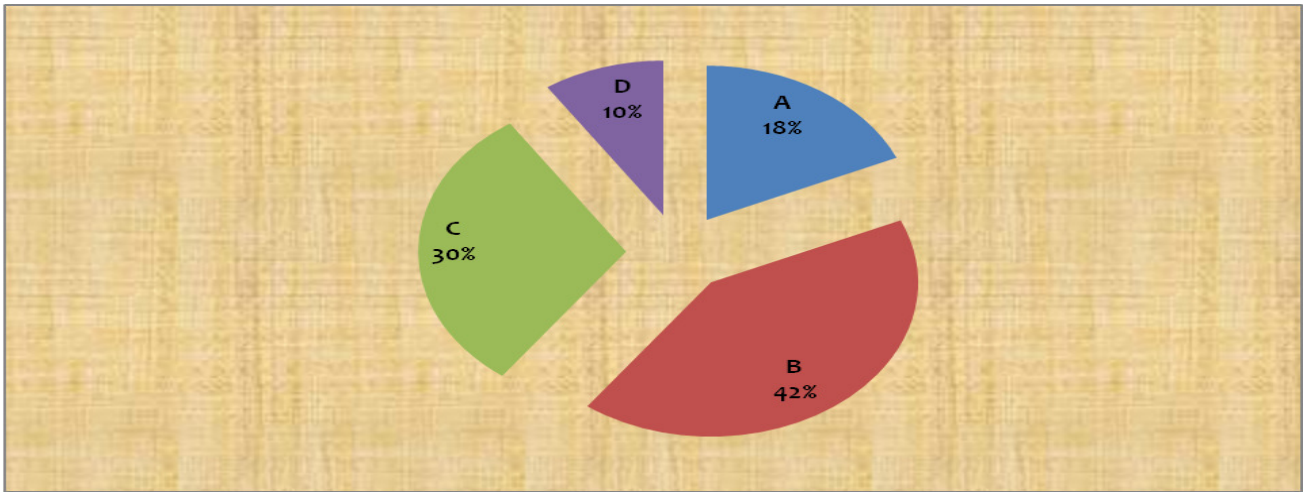


Table 4.11: ATARI wise Ranking of KVKs by Availability of Infrastructure (%)

Name of ATARI		Category of Rank			
		A	B	C	D
1.	Ludhiana	35	34	20	11
2.	Jodhpur	11	46	28	15
3.	Kanpur	14	35	35	16
4.	Patna	13	53	27	7
5.	Kolkata	16	26	47	11
6.	Guwahati	3	23	46	28
7.	Barapani	0	31	46	23
8.	Pune	29	47	24	0
9.	Jabalpur	12	58	29	1
10.	Hyderabad	25	42	31	2
11.	Bengaluru	39	50	11	0
	All India Ranking	**18**	**42**	**30**	**10**

Note: All percentages are rounded-off.

The infrastructure facilities form the basic strength of a KVK for undertaking core activities. 60% of KVKs were in "A" & "B" rank on this yardstick of infrastructure. However, there was a wide variation amongst zones. While the maximum number of KVKs in "A" rank were from Zone-XI, followed by Zone-I, in case of "C" rank, maximum percentages are in Zone-V, followed by Zone-VI, Zone-VII. Similarly maximum percentage of KVKs in "D" category were from Zone-VI & Zone-VII. This calls for a specific focus by the concerned ATARIs to relook at the infrastructure of these Zones, and to come up with one-time grant proposals to make them stand at par with other Zones.

In case of "A" category, ATARIs of Bengaluru, Ludhiana, and Pune are above national averages of 18%, and they are occupying 39%, 35% and 25% respectively. Barring few ATARIs like Guwahati and Barapani, more than 50% of the KVKs in all ATARIs are occupying A and B categories. In some cases like Bengaluru, Ludhiana, nearly two-thirds of the KVKs are placed in A&B categories put together.

The following table (4.12) presents the Ranking of KVKs by type of Management and by infrastructure:

Table 4.12: Rank wise distribution of KVKs by Type of Management and Availability of Infrastructure (%)

KVKs by type of Management	Category of Rank			
	A	B	C	D
ICAR	11	37	38	14
State Government	0	30	33	37
SAU	17	41	33	9
NGO	33	49	17	1
Other Educational Institutions	25	58	17	0
PSU	33	33	33	1
Total	**18**	**42**	**30**	**10**

Note: All percentages are rounded-off.

It was observed in the above table, the distribution of KVKs under all six types of managements and their rankings except the management of State Government, all other managements i.e., ICAR, SAU, NGO etc. are showing very good ranking. Clubbing both "A" and "B" together, more than 50% of KVKs are falling in all types of managements, except State Depts. It is noteworthy to observe that none of the KVKs under State Govt have secured A grade. Majority of KVKs in D category are under the local governance of State Government indicating that the infrastructure is poor in their cases.KVKs under the management of NGOs, PSUs, Other Educational Institutions, SAUs and ICAR are in "A" rank. It was surprising that a sizable number of KVKs under the management of ICAR, SAUs, NGOs were in "C" and "D" rank as per infrastructure.

The table below (4.13) presents the Rank wise distribution of KVKs linking the infrastructure and the period of establishment.

Table 4.13: Ranking of KVK by availability of Infrastructure and Period of Establishment (%)

Year of Establishment	A	B	C	D
1974 - 79	21	52	24	3
1980 - 84	28	40	28	5
1985 - 89	23	42	35	0
1990 - 94	26	56	17	1
1995 - 99	28	51	21	0
2000 - 04	19	44	33	4
2005 - 09	13	36	35	16
2010 - 12	4	18	43	35
Total (All India)	**18**	**42**	**30**	**10**

Note: All percentages are rounded-off.

The above data on ranking of KVKs by their period of establishment revealed that even the older KVKs are lacking the infrastructure facilities as substantial number of KVKs have secured B & C Ranking. Only one-fifth from the cohort of KVKs set up in the year 1974-79 could manage to secure A Ranking and more than 50 per cent have achieved B Ranking which were set up during this period. Among the KVKs set up during the recent period (2010-12), one-third of KVKs were categorized in D Ranking. Above outcome reveals that there are many other factors that contribute to the strengthening of infrastructure irrespective of period of establishment. The notion of older KVKs expected to be rich in infrastructure is proved to be wrong, and needs to be looked at other aspects. It was found that 24% of the KVKs established around four decades ago were still in "C" rank as per infrastructure. Overall, a sizeable number in "C" ranking were those established during 1974 to 1994. This is a matter of serious concern and calls for urgent attention.

The Following table (4.14) presents the Ranking of KVKs by states and by infrastructure Facilities:

Table 4.14: State wise distribution of Rank of KVKs by Availability of infrastructure (%)

Sl. No.	Name of the State	No. of KVKs as per Rank category			
		A	B	C	D
1	Andaman & Nicobar Islands	0	33	33	33
2	Andhra Pradesh	30	25	40	5
3	Arunachal Pradesh	0	8	31	62
4	Assam	5	23	59	14
5	Bihar	16	58	26	0
6	Chhattisgarh	10	55	30	5
7	Delhi	0	0	100	0
8	Goa	0	50	50	0
9	Gujarat	36	46	18	0
10	Haryana	17	56	28	0
11	Himachal Pradesh	25	50	25	0
12	Jammu & Kashmir	6	38	31	25
13	Jharkhand	9	45	27	18
14	Karnataka	43	47	10	0
15	Kerala	29	57	14	0
16	Madhya Pradesh	11	59	28	2
17	Maharashtra	25	48	27	0
18	Manipur	0	22	56	22
19	Meghalaya	0	20	20	60
20	Mizoram	0	88	13	0
21	Nagaland	0	11	78	11
22	Odisha	0	18	67	15
23	Puducherry	0	50	50	0

24	Punjab	65	20	5	10
25	Rajasthan	10	43	26	21
26	Sikkim	0	75	25	0
27	Tamil Nadu	21	55	24	0
28	Telangana	31	38	31	0
29	Tripura	0	0	50	50
30	Uttar Pradesh	13	35	35	16
31	Uttarakhand	31	38	23	8
32	West Bengal	47	41	12	0
	All India	**18**	**42**	**30**	**10**

Note: All percentages are rounded-off.

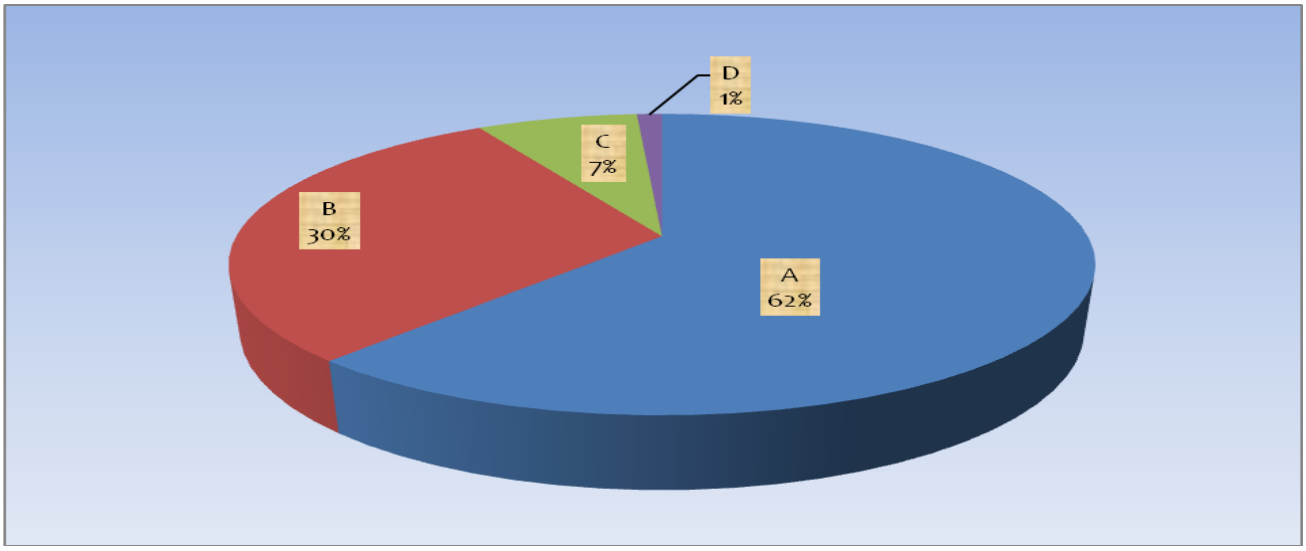
It is seen from the above table that more than half a dozen states in the country do not have the KVKs in A category. On the other hand Punjab state has the highest number of KVKs (65.0 %) in A category. Similarly Chattisgarh and Tamil Nadu have the highest number of KVKs in B category. Majority of the KVKs in North Eastern region have secured D category Rank. This needs to be looked at to strengthen the infrastructural base.

Compilation and comparison of the ranks under all categories (A,B,C,&D), by Zone, by Period of Establishment and by type of Management are given in Annex-D-1 & Annexure-D2.

4.7 Ranking of KVKs by Mandated Activities

In the following paragraphs, the Ranking is analysed in respect of mandated activities with respect to explanatory variables like type of management, period of establishment, Zone-wise(ATARI-wise)variations, and inter-state variations which is presented in Table 4.15. All India picture is depicted in figure 4.4.

Figure 4.4 Mandated Activities Ranking of KVKs



Nearly two-thirds of KVKs (386 KVKs) have occupied "A" category as per the assessment vis-à-vis mandated activities, with another 30% (187 KVKs) of them placed in "B" category. Only a small fraction of KVKs (8%) were placed in C & D categories. It is to highlight that only 7 % KVKs are occupying "C" category and around 1% of the KVKs are in the "D" category. It is a good sign that though, the infrastructural ranking is relatively weak, the mandated activity performed by KVKs is commendable in spite of odds faced by them in infrastructure.

It is praiseworthy to record that nearly two-thirds of KVKs under all the ATARIs have acquired "A" category, barring few ATARIs like Jodhpur, Pune, Hyderabad and Bengaluru. Further, three-fourths of KVKs under all ATARIS are in A&B ranks put together.

Table 4.15: Ranking of KVKs by Mandated activities - ATARI wise (%)

Sl. No.	Name of ATARI	Category of Rank			
		A	B	C	D
1	Ludhiana	72	25	3	0
2	Jodhpur	36	38	20	7
3	Kanpur	62	29	7	1
4	Patna	65	32	3	0
5	Kolkata	66	26	6	2
6	Guwahati	72	23	5	0
7	Barapani	83	17	0	0
8	Pune	51	35	12	1
9	Jabalpur	82	17	2	0
10	Hyderabad	56	33	11	0
11	Bengaluru	43	52	5	0
	All India	**62**	**30**	**7**	**1**

Note: All percentages are rounded-off.

Ranking as a function of Management and Zones/States is given in Annexure– D-3. Table 4.16 depicts the Ranking of KVKs on the basis of year of establishment.

Table 4.16: Distribution of KVKs by Period of Establishment and Rank of Mandated Activities (%)

Period of Establishment	Category of Rank				
	A	B	C	D	Total
1974 - 79	59	38	3	0	100
1980 - 84	68	28	5	0	100
1985 - 89	58	27	8	8	100
1990 - 94	64	29	5	2	100
1995 - 99	74	16	9	0	100
2000 - 04	65	29	4	1	100
2005 - 09	66	32	3	0	100
2010 - 12	33	38	28	1	100
Total	**62**	**30**	**7**	**1**	**100**

Note: All percentages are rounded-off.

It is revealed from the above table that two-thirds of the KVKs were placed in "A" category irrespective of period of establishment. It is commendable that irrespective of longevity of the KVKs, i.e. whether established four decades back, or one decade old, all the KVKs are delivering goods with the same zeal and enthusiasm as shown in the above table. Table (4.17) below highlights the Ranking of KVKs on the basis of management type.

Table 4.17: Ranking of KVKs on the basis of Mandated Activities and Type of Management (%)

KVKs by Type of Management	Category of Rank				
	A	B	C	D	Total
ICAR	65	29	6	0	100
Government	64	27	9	0	100
SAU	59	31	8	2	100
NGO	71	26	3	0	100
Other Educational Institutions	75	25	0	0	100
PSU	33	67	0	0	100
Total	**62**	**30**	**7**	**1**	**100**

Note: All percentages are rounded-off

It is highly commended that except under PSU, all the managements (ICAR, SAU, NGOs etc.) are supporting KVKs in all mandated activities. Here again, irrespective of type of management, 90% of KVKs are getting technological support, back-up from their respective managements as per the data provided by each KVK.

4.8 Ranking of KVKs by Impact of Mandated Activities

The following figure highlights the ranking of KVKs according to the impact of the mandated activities of KVKs.

Figure 4.5 Impact of Mandated Activities: Ranking of KVKs

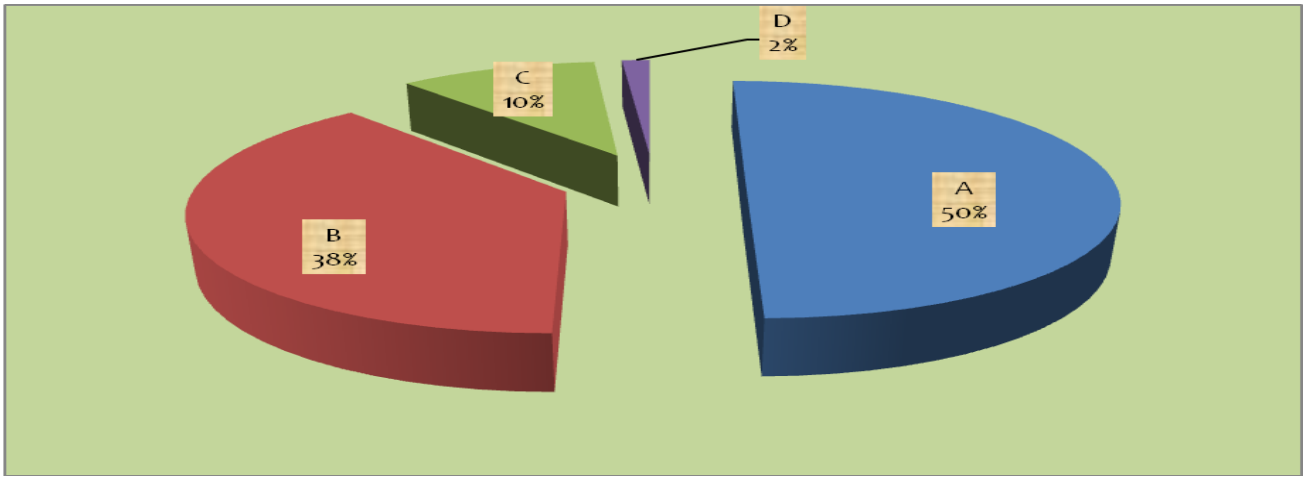


Table 4.18 indicates the ranking of KVKs on the basis of overall impact on farmers through mandated activities carried out by them. 50% KVKs have been categorized in "A" Rank, while 39% per cent have secured "B" Rank. Only 11% of the KVKs are falling in C&D categories put together. These trends are in synchrony with the mandated activities as illustrated in previous sections, as the impact and tangible output are directly related to mandated activities.

Table 4.18: Ranking of KVKs by effect/impact of mandated activities - ATARI wise (%)

Sl. No.	Name of ATARI	Category of Rank				
		A	B	C	D	Total KVKs
1	Ludhiana	38	44	18	0	100
2	Jodhpur	10	36	49	5	100
3	Kanpur	56	34	7	3	100
4	Patna	53	45	2	0	100
5	Kolkata	74	25	2	0	100
6	Guwahati	62	33	5	0	100
7	Barapani	66	26	9	0	100
8	Pune	47	47	1	4	100
9	Jabalpur	62	36	2	0	100
10	Hyderabad	48	42	8	2	100
11	Bengaluru	45	45	9	0	100
	All India	**50**	**38**	**10**	**1**	**100**

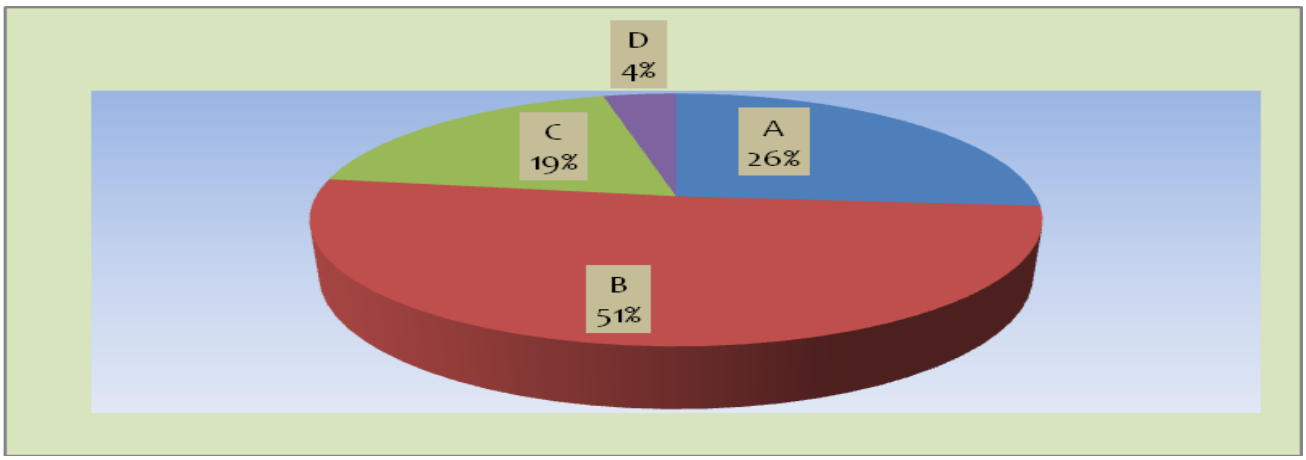
Note: All percentages are rounded-off.

The highest proportion of KVKs representing "A" category were in the Zones of Kolkata (74%), followed Barapani (66%). The Pune ATARI has got highest proportion in B category, and Jodhpur ATARI has got highest ranking in C category (49.2%) as for as the impact of mandated activities is concerned.

4.9 Ranking of KVKs by Allied Activities & Accolades

An attempt has been made to categorize the KVKs on the basis of allied activities & accolades that include the individual contributions of SMSs, usage of ICT in dissemination of information and outreach to farmers, exploiting local avenues to benefit the farming community at large (Figure 4.6).

Figure 4.6 Rank of KVKs by Allied Activities and Accolades



It is seen from the above figure that more than three-fourths of KVKs have performed well and were placed in a combined lot of "A" & "B" categories. 51% of KVKs have secured B Rank for their contribution in allied activities. Majority of contributions and performance under the allied activities are from miscellaneous activities, and individual contributions of SMSs in their academic, research and publication activities.

The following table (4.19) presents the ATARI wise Ranks of KVKs on the basis of these allied activities. This performance indicator shows the extent of support provided by the ATARIs who are their mentors in all the activities of KVKs.

Table 4.19: Ranking of KVKs by Allied Activities and Accolades - ATARI wise (%)

S. No.	Name of ATARI	Category of Rank				
		A	B	C	D	Total KVKs
1	Ludhiana	20	62	13	5	100
2	Jodhpur	12	39	39	10	100
3	Kanpur	27	51	21	1	100
4	Patna	37	40	18	5	100
5	Kolkata	38	47	13	2	100
6	Guwahati	8	49	36	7	100
7	Barapani	14	63	20	3	100
8	Pune	26	54	16	4	100
9	Jabalpur	27	65	8	0	100
10	Hyderabad	39	38	18	5	100
11	Bengaluru	34	57	9	0	100
	All India	**26**	**51**	**19**	**4**	**100**

Note: All percentages are rounded-off.

It is seen from the above table that maximum proportion so far as the allied activities are concerned was observed in B category. In case of Jabalpur, Ludhiana and Barapani ATARIs the proportion was more than 60.0 per cent. Guwahati and Jodhpur ATARIs have registered highest number of KVKs in C and D categories respectively.

The following table (4.20) presents the ranking of KVKs by the period of establishment correlating their performance under allied activities that directly and indirectly helps the farming community in general.

The table indicates that a higher proportion of KVKs have registered B ranking on the basis of contributions under allied activities carried out by them. Only about 10% of KVKs have achieved "A" rank which were set up in the recent past (2010-12), whereas, 31% have secured C ranking though these KVKs were set up during 1985-89.

Technical, logistic, moral support by the managements play a crucial role in achieving maximum points under allied activities, as it improves the morale of SMSs. The table 4.21 shows the trends of ranks of KVKs under

different managements. 48% KVKs were categorized in B category managed by ICAR and 45% have secured C Rank under the management of State Departments.

Table 4.20: Rank of KVKs by Allied Activities and Accolades and Period of Establishment (%)

Year of Establishment	Category of Rank				
	A	B	C	D	Total
1974 - 79	34	52	14	0	100
1980 - 84	40	48	13	0	100
1985 - 89	23	42	31	4	100
1990 - 94	29	50	18	3	100
1995 - 99	40	47	12	2	100
2000 - 04	28	54	14	4	100
2005 - 09	23	52	21	4	100
2010 - 12	10	51	31	8	100
Total	**26**	**51**	**19**	**4**	**100**

Note: All percentages are rounded-off.

The table 4.22 presents the state wise Ranking status by states as per the extension activities:

Table 4.21: Rank of KVKs of their Allied Activities by type of management (%)

KVKs by Type of Management	Category of Rank				
	A	B	C	D	Total
ICAR	33	48	19	0	100
Government	12	36	45	6	100
SAU	24	55	17	5	100
NGO	39	43	17	2	100
Other Educational Institutions	42	17	42	0	100
PSU	33	33	33	0	100
Total	**26**	**51**	**19**	**4**	**100**

Note: All percentages are rounded-off

Table 4.22: State wise Ranking of KVKs by Allied Activities and Accolades (%)

ATARI	Name of the State	Ranks				
		A	B	C	D	Total
Zone – I	Himachal Pradesh	25	58	8	8	100
	Jammu & Kashmir	6	56	25	13	100
	Punjab	15	85	0	0	100
	Uttarakhand	38	38	23	0	100
Zone - II	Delhi	0	100	0	0	100
	Haryana	11	61	22	6	100
	Rajasthan	12	29	48	12	100
Zone - III	Uttar Pradesh	26	51	21	1	100
Zone - IV	Bihar	42	34	18	5	100
	Jharkhand	27	50	18	5	100
Zone - V	Andaman & Nicobar Islands	0	67	33	0	100
	Odisha	27	58	12	3	100
	West Bengal	65	24	12	0	100
Zone - VI	Assam	9	59	18	14	100
	Arunachal Pradesh	8	38	54	0	100
	Sikkim	0	25	75	0	100
Zone - VII	Manipur	11	89	0	0	100
	Meghalaya	20	80	0	0	100
	Mizoram	13	63	25	0	100
	Nagaland	0	44	44	11	100
	Tripura	50	25	25	0	100
Zone - VIII	Goa	0	50	0	50	100
	Gujarat	18	50	29	4	100
	Maharashtra	32	57	9	2	100

Zone – IX	Chhattisgarh	10	75	15	0	100
	Madhya Pradesh	35	61	4	0	100
Zone – X	Andhra Pradesh	20	45	25	10	100
	Puducherry	50	0	50	0	100
	Tamil Nadu	52	34	10	3	100
	Telangana	38	38	23	0	100
Zone - XI	Karnataka	40	53	7	0	100
	Kerala	21	65	14	0	100
	All India	**26**	**51**	**19**	**4**	**100**

Note: All percentages are rounded-off.

4.10 Analysis of Inferential Correlation Coefficients

Across all the 5 major implicit & independent parameters of all 625 KVKs, and overall performance i.e., (a) infrastructure, (b) mandated activities, (c) impact of mandated activities, (d) extension activities, (e) overall performance), the deviation from the normal distribution in each of these five types of rankings of all 625 KVKs was captured, and presented in the following Tables and Histogram Figures of Frequency Distribution (Tables 4.25(a) to 4.25 (e), and Figures 4.5(a) to 4.5 (e))

It is obvious that among the cluster of 625 KVKs, there are variations and these variations in rankings have to be magnified from the statistical point of view and to be examined with respect to the ideal/hypothetical values/ ranges. These deviations are captured out of the normal distribution data as stated in the tables and charts for each of the exploratory variables.

Apart from the inferences drawn from basic statistical parameters like mean, median, standard deviation, few more variables like skewness, and kurtosis were also measured to capture the comprehensive picture of deviations from normality, and symmetry of distribution of data. Skewness that reveals the extent of asymmetry of the probability distribution, is gauged from the extended tail portions at both the ends of right and left sides of the charts given below. Similarly, the kurtosis that measures the "heaviness of tail" or "tailedness" or the "peakness" of the distribution curve is presented in the charts as well as in the tables for each explanatory variable.

Therefore, the important statistical parameters like mean, median, standard deviation, skewness, kurtosis among many other factors are listed in the following tables and charts.

Compilation of all the the inferential statistical data is presented in Table- 4.23(a) to 4.23(f).

The table 4.22 presents the state wise Ranking status by states as per the extension activities:

Table-4.23(a): Inferential Parameters of 625 KVKs : Infrastructure

N	Valid	625
	Missing	0
Mean		.5501
Std. Error of Mean		.00854
Median		.5700
Mode		.57
Std. Deviation		.21361
Variance		.046
Skewness		-.240
Std. Error of Skewness		.098
Kurtosis		-.488
Std. Error of Kurtosis		.195
Range		1.00
Minimum		.00
Maximum		1.00

Figure 4.7(a): Frequency Distribution of Infrastructure Grades of 625 KVKs

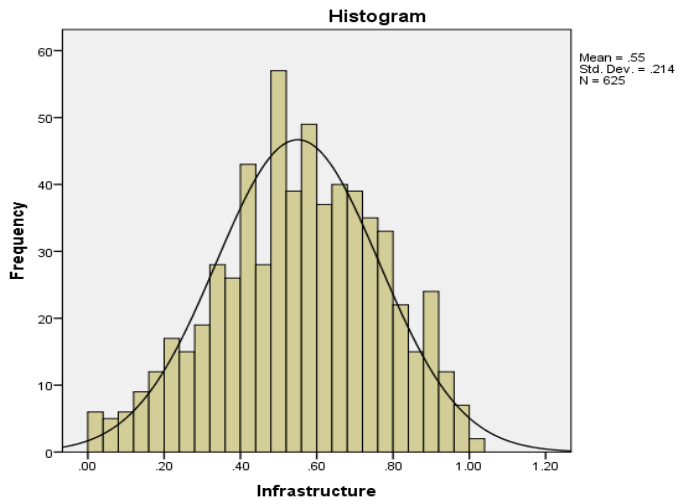


Table-4.23 (b): Inferential Parameters of 625 KVKs: Mandated Activities

N	Valid	625
	Missing	0
Mean		.7556
Std. Error of Mean		.00654
Median		.7900
Mode		.87
Std. Deviation		.16353
Variance		.027
Skewness		-1.351
Std. Error of Skewness		.098
Kurtosis		2.405
Std. Error of Kurtosis		.195
Range		1.00
Minimum		.00
Maximum		1.00

Table-4.23 (c): Inferential Parameters of 625 KVKs: Impact of Mandated Activities

N	Valid	625
	Missing	0
Mean		.7182
Std. Error of Mean		.00689
Median		.7500
Mode		.86
Std. Deviation		.17231
Variance		.030
Skewness		-.929
Std. Error of Skewness		.098
Kurtosis		.994
Std. Error of Kurtosis		.195
Range		1.00
Minimum		.00
Maximum		1.00

Table-4.23 (d): Inferential Parameters of 625 KVKs: Extension Services

N	Valid	625
	Missing	0
Mean		.6241
Std. Error of Mean		.00737
Median		.6600
Mode		.66
Std. Deviation		.18421
Variance		.034
Skewness		-.835
Std. Error of Skewness		.098
Kurtosis		.524
Std. Error of Kurtosis		.195
Range		1.00
Minimum		.00
Maximum		1.00

Figure 4.7(b): Frequency Distribution of Ranking of Mandated Activities of 625 KVKs

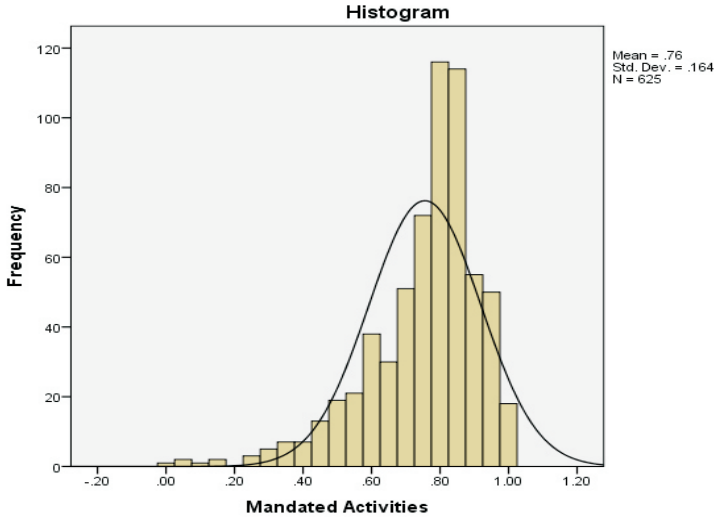


Figure 4.7(c): Frequency Distribution of Ranking of Impact of Mandated Activities of 625 KVKs

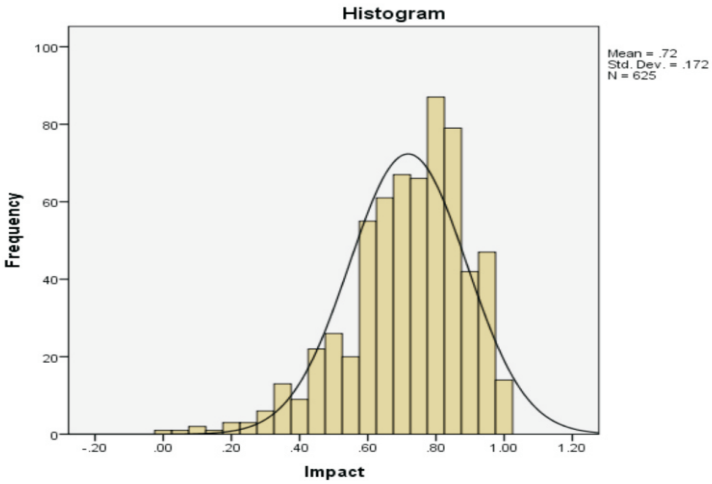


Figure 4.7(d): Frequency Distribution of Ranking of Extension Services of 625 KVKs

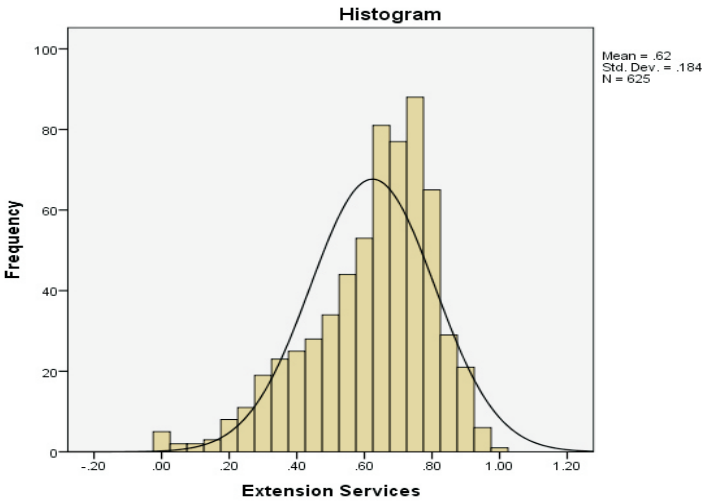


Table-4.23 (e): Inferential Parameters of 625 KVKs: Overall Performance

N	Valid	625
	Missing	0
Mean		.7088
Std. Error of Mean		.00591
Median		.7300
Mode		.73
Std. Deviation		.14775
Variance		.022
Skewness		-1.092
Std. Error of Skewness		.098
Kurtosis		1.729
Std. Error of Kurtosis		.195
Range		1.00
Minimum		.00
Maximum		1.00

Figure 4.7 (e): Frequency Distribution of Ranking of Overall Performance of 625 KVKs

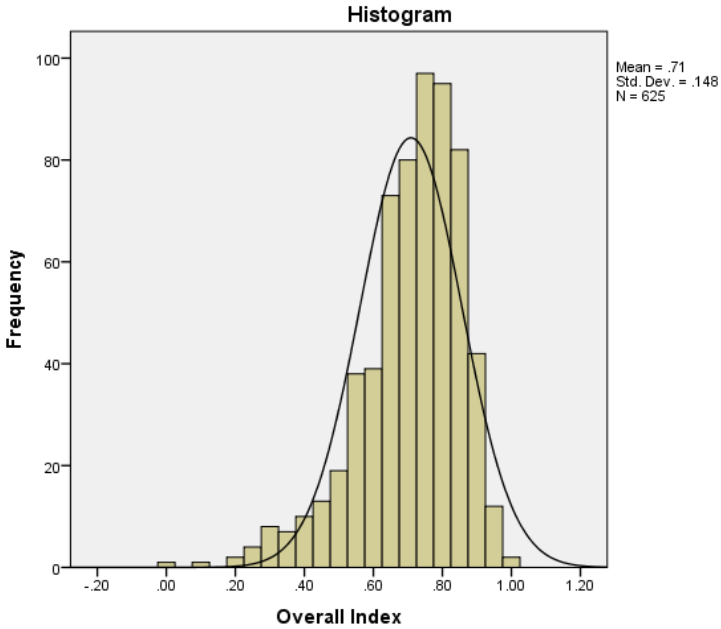


Table-4.23 (f): Descriptive Statistics: Inferential Parameters at a glance

Sl. No.		N Statistic	Minimum Statistic	Maximum Statistic	Mean Statistic	Mean Std. Error	Deviation Statistic	Variance Statistic	Skewness Statistic	Skewness Std. Error	Kurtosis Statistic	Kurtosis Std. Error
1	Infrastructure	625	.00	1.00	.5501	.00854	.21361	.046	-.240	.098	-.488	.195
2	Mandated Activities	625	.00	1.00	.7556	.00654	.16353	.027	-1.351	.098	2.405	.195
3	Impact	625	.00	1.00	.7182	.00689	.17231	.030	-.929	.098	.994	.195
4	Extension Services	625	.00	1.00	.6241	.00737	.18421	.034	-.835	.098	.524	.195
5	Valid N (listwise)	625										

CHAPTER V

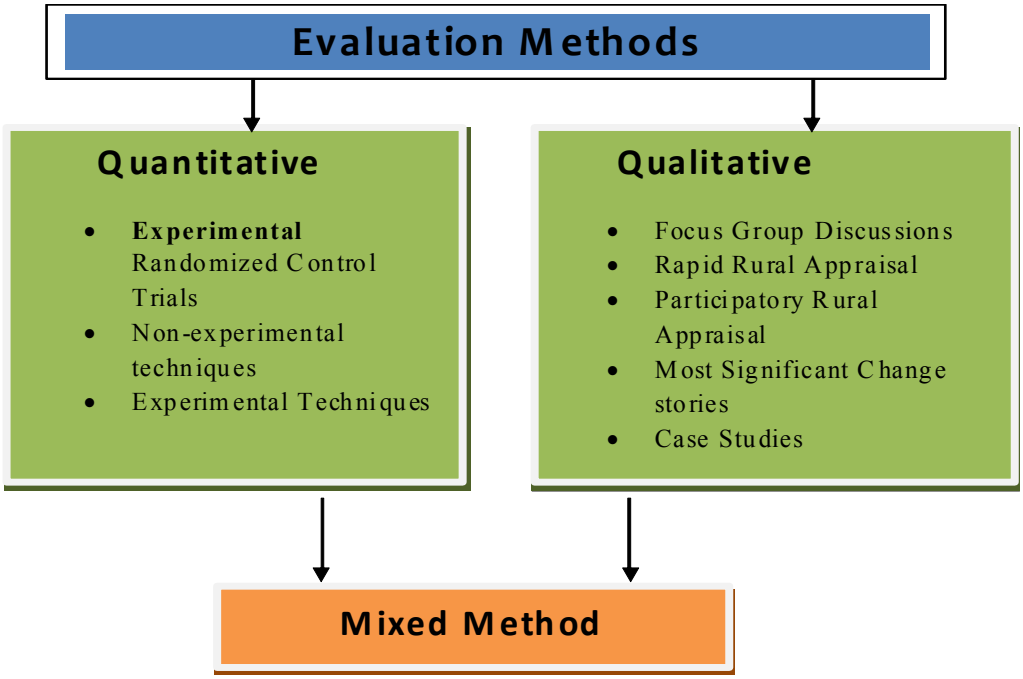
ANALYSIS OF IMPACT AND EFFICACY OF KVKs

5.1 Conceptual Framework

Impact evaluation investigates the changes brought about by an intervention.These changes may be positive and negative, direct and indirect. Development programmes and policies are designed to have positive change in outcomes. In contrast to outcome monitoring, which examines whether targets have been achieved, impact evaluation is structured to answer the larger question: has there been any change in the situation which the intervention was planned to correct and how has the intervention impacted the lives of the intended beneficiaries. Whether or not these changes are actually achieved is a crucial public policy question. Impact evaluations seek to answer cause-and-effect questions. Through the impact evaluation changes can be attributed to a particular project, programme or policy. Thus, focus on attribution is the hallmark of impact evaluations. Such analysis helps in evidence-based policy decisions and understanding what works, what doesn't.

For conducting impact evaluations quantitative or qualitative methods or a combination of both methods can be used. Figure below depicts some of these methods used commonly.

Figure 5.1: Methodologies of Impact Evaluation



Data availability and their quality are integral in assessing the programme effects. Data requirement depends on whether evaluators are applying a quantitative or qualitative approach or both.

5.2 Impact and Efficacy of KVKs

The present study has utilized quantitative data collected from 625 KVKs which was further validated on sample basis by using qualitative techniques such as Focus Group Discussion (FGD) and Observation Method.

As an effective impact evaluation should be able to assess precisely the mechanisms by which beneficiaries are responding to the intervention, these mechanisms in the present case are: increase in acreage, increase in productivity

and income, links to markets, value addition, problems related to day to day farming solved, entrepreneurship skills developed amongst women and youth through vocational training, adoption of organic farming etc.

To ensure a useful feedback, a theory of change was constructed to understand how various activities of KVKs are making difference in the lives of farming community. A theory of change (TOC) describes how intervention activities are understood to contribute to a chain of intermediate outcomes that produce intended and potential unintended impacts. The programme logic also identifies the assumptions and external factors that will influence the extent to which outputs lead to intended outcomes.

The theory of change provides a logical sequential chain of change which has been postulated to occur as a result of the activities of KVK. These are linked together by causal pathways which determine the direction of the relationship between these changes and show how they lead to the long term outcomes and impact to which the programme is intended. This chain of sequence shows that the next set of activities will depend on the occurrence of a previous set of events. There are assumptions in TOC that if the inputs are available on time then only the activities indicated will be performed. Thus, outputs would depend upon the specific activities leading to outcome and long-term impacts.

Figure 5.2: Theory of Change

INPUT	PROCESS	OUTPUT	OUTCOME	IMPACT
• Human Resource: Subject matter specialists, Programme Coordinators, ATARI Directors, other technical experts , non- technical experts • Infrastructure: office building, demonstration units, seeds, laboratories, vehicle etc. • Availability of financial support • Availability of new technology	• OFT • FLD • Linkage with research institutes • Problem solving of stakeholders • Vocational training • Advice on establishment of vermi-compost units • Rain water harvesting • organisation of vocational training programmes • creating awareness about balanced nutrition	• No. of OFTs • No. of FLDs • No. of problems solved • No. of technologies taken for demons-tration • No. of problems referred to research institutions • No. of vocational training programmes conducted • No. of farmers attended training programmes	• adoption of new technology demonstrated • reduction in the input cost • adoption of organic farming • starting of self employment ventures • Change in nutrition pattern	• Increase in acreage • Increase in Productivity of agriculture • Reduction in cost of farming • Increase in incomes • Mechanisation of agricultural activities • Inclusion of small farmers • Inclusion of youth and women and other vulnerable groups • Better quality of life in villages • Horizontal spread of technology • Improvement in the agricultural economy of the district

Assumptions

1. *Availability of resources such as new and suitable technology, financial resources, technical expertise, technical demonstration units etc.*
2. *Farmers' participation in technology demonstration*
3. *Farmers' willingness to adopt new technology*
4. *Conducive Local and Regional conditions*

5.2.1 Inputs received from KVKs on Activities performed

In order to assess the impact, it is essential to understand the input support available with KVKs and the volume of various mandated and non-mandated activities performed by them. Farm productivity can be increased by improved inputs as well as improved technology. KVKs play a vital role as they assess and demonstrate frontline

technologies developed by the research institutes in the country for its application. In addition, KVKs produce quality technological products like seeds, planting material, bio-agents, livestock etc. and make them available to farmers. These Institutes also identify and document selected farm innovations. Availability of inputs required for performing various activities by KVKs such as infrastructure, technical expertise, financial support etc. have been discussed in the previous chapter. An attempt has been made in this chapter to assess the impact of the activities performed by KVKs based on the data received.

5.2.1.1 Villages Covered by KVKs

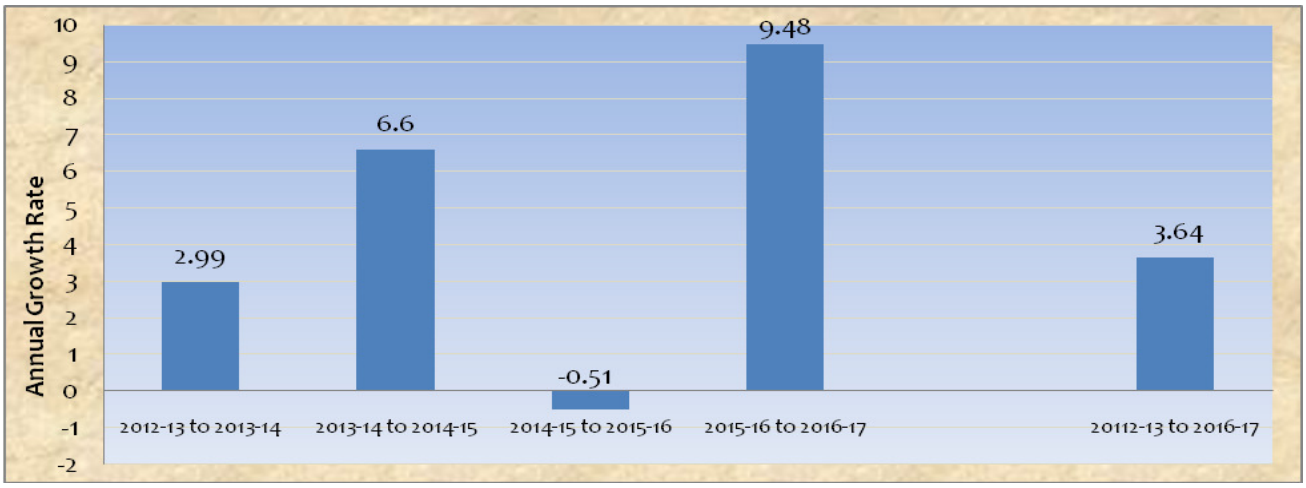
Coverage of villages is an indicator of outreach of KVKs. The information received revealed that in all during the five years period KVKs covered 62394 village which comes to an average of about 20 villages covered per year (Table 5.1) .

Table 5. 1: No. of Villages Covered by KVKs during 2012-13 to 2016-17

State	2012-13	2013-14	2014-15	2015-16	2016-17	Total
1. Andaman & Nicobar Islands	34	37	31	49	51	202
2. Andhra Pradesh	515	546	712	496	602	2871
3. Arunachal Pradesh	330	289	318	330	265	1532
4. Assam	607	649	640	684	631	3211
5. Bihar	1053	1260	1176	1138	1303	5930
6. Chhattisgarh	243	282	326	335	346	1532
7. Delhi	36	35	29	22	25	147
8. Goa	59	53	37	33	62	244
9. Gujarat	163	241	344	337	322	1407
10. Haryana	767	849	865	1047	1116	4644
11. Himachal Pradesh	283	290	253	266	253	1345
12. Jammu Kashmir	202	198	279	236	262	1177
13. Jharkhand	365	406	409	426	465	2071
14. Karnataka	264	229	219	198	215	1125
15. Kerala	253	263	166	180	313	1175
16. Madhya Pradesh	1400	1381	1637	1780	2027	8225
17. Maharashtra	523	627	668	561	673	3052
18. Manipur	421	327	292	225	287	1552
19. Meghalaya	58	91	112	98	108	467
20. Mizoram	147	147	128	147	156	725
21. Nagaland	226	177	206	168	157	934
22. Odisha	784	843	823	791	1054	4295
23. Puducherry	46	16	21	11	14	108
24. Punjab	283	349	394	413	396	1835
25. Rajasthan	238	261	308	304	298	1409
26. Sikkim	100	102	82	93	70	447
27. Tamil Nadu	398	229	265	224	288	1404
28. Telangana	231	219	250	275	292	1267
29. Tripura	40	53	60	65	65	283
30. Uttar Pradesh	966	934	1034	1065	1094	5093
31. Uttarakhand	138	134	212	200	205	889
32. West Bengal	347	348	352	387	362	1796
Total	**11520**	**11865**	**12648**	**12584**	**13777**	**62394**

Figure 5.3 below depicts the growth and coverage of villages during the five years period. It was observed that coverage increased by about 3.7 percent from 2012-13 to 2016-17 while annual growth rate showed fluctuation. Coverage of villages by KVKs increased by about 3 percent during 2012-13 to 2013-14 but it observed negative growth during 2014-15 to 15-16. Highest growth was observed during 2015-16 to 2016-17. States of Haryana, Himachal Pradesh, Jharkhand ,Madhya Pradesh, Mizoram, Punjab, Telangana, Uttar Pradesh and West Bengal showed increased coverage while remaining reported decline.

Figure 5.3. Growth of villages Covered by KVKs during 2012-13 to 2016-17



5.2.1.2 OFTs and FLDs organized by KVKs

To assess the impact, information from KVKs was sought on the number of OFTs and FLDs undertaken during the five years period, which is presented in Table 5.2 below. The data reveals that highest number of on-farm testing (7,682) which aim to assess the location specific technologies under various farming systems were done in the State of Madhya Pradesh. Frontline demonstrations (FLDs) are conducted by KVKs to establish the production potential of the technologies on the farmers' fields. With 13,184 FLDs conducted, Madhya Pradesh topped in FLDs as well. Delhi has the least number of OFTs conducted while Pondicherry recorded the lowest number of FLDs. This may be due to urban sorroungs and small arable land. State wise progress of OFTs and FLDs during last five years is placed at Annexure E-1 and E-2.

Table 5.2: State-wise Distribution of OFTs and FLDs by KVKs during the last Five Years (2012-13 to 2016-17)

Sl. No.	State	No. of OFT	No. of FLDs
1.	Andaman & Nicobar Islands	97	131
2.	Andhra Pradesh	1432	2791
3.	Arunachal Pradesh	1609	3082
4.	Assam	2517	3065
5.	Bihar	1570	19030
6.	Chhattisgarh	1429	2556
7.	Delhi	55	813
8.	Goa	137	509
9.	Gujarat	2643	19232
10.	Haryana	1800	15849
11.	Himachal Pradesh	1320	14595
12.	Jammu & Kashmir	690	19639
13.	Jharkhand	1380	10835
14.	Karnataka	1387	5147
15.	Kerala	1290	2119
16.	Madhya Pradesh	7682	13184
17.	Maharashtra	3728	6298
18.	Manipur	1153	925
19.	Meghalaya	1046	517
20.	Mizoram	1252	958
21.	Nagaland	1472	1139
22.	Odisha	3977	3164
23.	Puducherry	30	104
24.	Punjab	1338	25656
25.	Rajasthan	1245	54065
26.	Sikkim	611	1162
27.	Tamil Nadu	1492	4370

28.	Telangana	747	1270
29.	Tripura	1089	749
30.	Uttar Pradesh	6347	35386
31.	Uttarakhand	667	20988
32.	West Bengal	1182	12842
	Total	**54414**	**302170**

5.2.1.3 No. of Training Programmes conducted

As has been discussed, the KVKs are providing capacity development to farmers to update their knowledge and skills on modern agricultural technologies. The details of training programmes organized for farmers and youth is given in Table 5.3. KVKs are also conducting training for women to impart skill so that they can earn supplementary income and improve their farming activities. The table reveals that several training programmes have been organized by KVKs which were received well by the farmers as reflected by the participation of farmers, youth and women in large numbers. State wise details of training programmes organized and farmer's participation for the last five years is annexed at Annexure E-3 to E-6.

Table 5.3: No. of Training Programmes conducted by KVKs and Beneficiaries covered during the five years (2012-13 to 2016-17)

Sl. No.	State	No. of Farmer's Training conducted	No. of Farmers participated	No. of Youth participated	No. of women participated
1.	Andaman & Nicobar Islands	403	11543	3244	4893
2.	Andhra Pradesh	4940	173148	33600	53045
3.	Arunachal Pradesh	3338	85966	11189	45727
4.	Assam	4942	137227	45592	46944
5.	Bihar	20558	620954	124521	118616
6.	Chhattisgarh	6383	207994	35401	51127
7.	Delhi	288	6081	0	1485
8.	Goa	475	11030	2209	5173
9.	Gujarat	10806	349798	47787	105964
10.	Haryana	9119	248214	60726	49169
11.	Himachal Pradesh	3616	126358	36389	58837
12.	Jammu & Kashmir	4160	102544	17007	23656
13.	Jharkhand	8607	261956	65522	84171
14.	Karnataka	9169	359661	55068	93289
15.	Kerala	6623	231248	62363	101199
16.	Madhya Pradesh	16573	455193	66807	92551
17.	Maharashtra	15238	488254	101131	115830
18.	Manipur	2166	50165	14036	20770
19.	Meghalaya	1992	49780	7448	27592
20.	Mizoram	2178	70364	11285	24289
21.	Nagaland	2699	74486	13590	38734
22.	Odisha	7228	181887	24155	51357
23.	Puducherry	486	12873	2146	6665
24.	Punjab	7059	129038	61339	35719
25.	Rajasthan	14550	376015	23998	94314
26.	Sikkim	1274	34526	16450	16863
27.	Tamil Nadu	13805	460059	60805	166172
28.	Telangana	3140	97695	29462	26560
29.	Tripura	1104	25759	6033	7570
30.	Uttar Pradesh	33064	690350	115048	134153
31.	Uttarakhand	4367	100783	7500	45365
32.	West Bengal	8675	267751	56552	69239
	Total	**229025**	**6498700**	**1218403**	**1817038**

5.2.1.4 Problems Identified and OFTs Designed

Idemtification of problems are very important component of the mandated activities of KVKs. Hence, performance of KVKs cannot be reflected without looking into this aspect. Table 5.4 depicts the performance of KVKs in this regard in various states. It has been observed from the table that in the country as a whole, 29,044 problems were identified by KVKs and 27,964 OFTs were designed to solve the identified problems. KVKs were able to solve bout 86 per cent of the problems through OFTs designed at all-India level. Number of trials taken for demonstration by all KVKs for the period under consideration was 14,676. About 4,732 problems of the farmers were referred back to research Institutes for further research.

Table 5.4: Problems Identified and OFTs Designed

ATARI	States	Number of				
		Problems Identified	OFT Designed to Solve the Problem	Problems Solved	Trials taken to Demonstration	Problems Referred to Research Institutions
Ludhiana	1.Himachal Pradesh	794	729	650	286	118
	2.Jammu & Kashmir	450	450	305	259	082
	3.Punjab	803	1050	477	406	168
	4.Uttarakhand	427	492	336	143	031
Jodhpur	5.Delhi	036	054	011	008	003
	6.Haryana	690	716	374	487	294
	7.Rajasthan	1046	841	825	535	298
Kanpur	8.Uttar Pradesh	2915	3427	2491	2194	710
Patna	9.Bihar	1585	1500	1311	772	282
	10.Jharkhand	986	767	856	422	132
Kolkata	11.A. & N. Islands	102	092	089	048	023
	12.Odisha	361	2408	2041	1199	498
	13.West Bengal	719	606	395	258	246
Guwahati	14.Assam	911	932	762	447	066
	15.Arunachal Pradesh	588	565	542	146	009
	16.Sikkim	129	129	129	099	012
Barapani	17.Manipur	616	704	502	366	054
	18.Meghalaya	285	280	263	216	037
	19.Mizoram	585	714	540	526	038
	20.Nagaland	645	654	524	350	046
	21.Tripura	205	191	146	054	032
Pune	22.Goa	157	040	080	051	044
	23.Gujarat	720	623	563	270	055
	24.Maharashtra	3002	1773	2168	1048	260
Jabalpur	25.Chhattisgarh	1467	1502	1166	536	105
	26.Madhya Pradesh	3263	3193	2810	2193	481
Hyderabad	27.Andhra Pradesh	1324	996	882	496	156
	28.Puducherry	086	030	026	007	000
	29.Tamil Nadu	1137	665	775	233	108
	30.Telangana	1002	743	719	178	109
Bengaluru	31.Karnataka	1058	638	693	326	162
	32. Kerala	950	460	495	115	073
	All India	**29044**	**27964**	**23946**	**14674**	**4732**

Box: 1

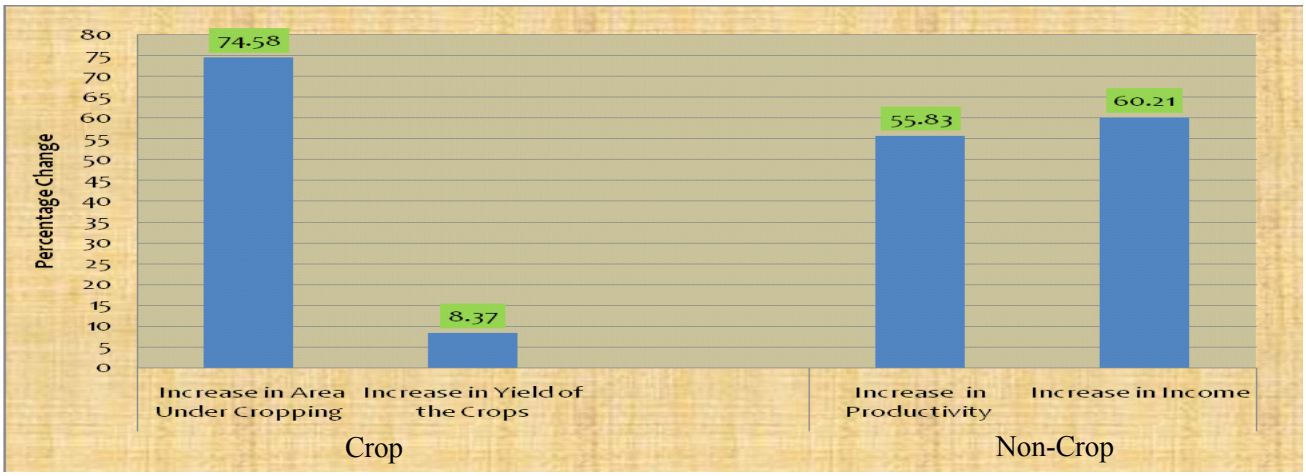
KVKs have an edge over other organisations

- KVKs have demonstration units and farmers visiting KVK can obtain thorough knowledge about technologies by getting first-hand experience.
- KVKs have a team of technical experts in varying disciplines like agriculture, horticulture, animal science, home science, etc. and therefore, advice to the farmers is provided by specialists under one umbrella.
- KVKs have flexibility in their activities and therefore, provide information as per demands of the farmers.
- KVKs use ICT and provide mobile advisory services.

5.3 Impact of Technology Dissemination by KVKs

To observe the difference made by KVKs on agriculture, increase in area under cropping is an important indicator. Area under cropping which includes Cereals, Pulses, and Horticulture produce has shown remarkable changes after the interventions/ dissemination of Technology by KVKs as it has shown increase of 74.58 while productivity showed a minor change during 2012-13 to 2016-17. This change is for all major crops under each KVK district in the country. The yield and productivity of the crops has increased to moderate level 8.37 percent at national level during the last five years. The increasing outreach of villages by KVKs shows that, they are in contact with the large number of farming community and guiding them in their day to day problems thereby playing an active role in improving farmer welfare.

Figure 5.4: Impact of Technology Dissemination



Non-crops which include Animals, Fishery, Poultry, Farm Machinery, Agriculture Enterprises has shown remarkable changes in the country during the above mentioned period. Productivity and income from these activities hasshown an appreciable improvement after the intervention of KVKs leading to increase in farmer's income as shown above during the last five years. Although the entire improvement occurred may not be attributed to KVKs only, interventions of KVKs which have vast network nationwide are instrumental in this reged. This reftects that KVKs may play a major role in ahicving the target of Government of India of doubling former's Income by 2022. Some of the new techniqnes of forming introduce to the formers by KVKs have helped in enhancing their income. The box 2 highlights impact of drum seeder on rice cultivation which has helped the farmer in enhancing the yield of rice . A horizontal spread of this technology was also noticed in the village.

Box : 2

A case of Direct Seeding in rice with drum Seeder : A case of KVK Chittor I

Mr. Vijaya Bhaskar is an young farmer from Annur village of Karvetinagaram Mandal who learnt about the drumseeder method when he attended a mandal level training organised by KVK at Karvetinagaram mandal headquarters and field day at Rajulakandriga village. He adopted drumseeder method in the same year in 0.5 acres and was highly satisfied. This technology reduced cost of cultivation and productivity also improved by 30 per cent over traditional methods of rice cultivation. The yield obtained from his field was 1500 kg. Not only that Mr. Bhaskar shifted from traditional transplanting to direct sowing using drumseeder and is continuing, KVK appointed him as the facilitator for this innovative technology in training .He mobilized other farmers to adopt this new technology. Mr. Bhaskar is technically equipped with all the package of practices and facilitates the expansion of the technology in his own mandal as well as in adjacent mandals. Mr. Vijaya

Bhaskar assisted the farmers of his village and adjacent villages by demonstrating drumseeder method in their field. A drum seeder and a modified conoweeder were placed with Mr. Vijaya Bhaskar so that any farmer from his own village or neighbouring villages can use them free of cost. Since the number of farmers adopting drumseeder method is fourfold in a span of one year, RASS-KVK handed over three more drumseeders and conoweeders to Vijaya Bhaskar. The area under drum seeder wich was confined to just one Gram Panchayat during 2010 was later spread to all the 21 Gram Panchayats of Karvetinagaram as well as in the adjacent S.R. Purammandal. The significant achievement of this project is that the farmers once adopt this method are continuing. A complete shift of cultivation method to "Modified SRI" is observed in some villages.

KVKs are also promoting off season activities for enhancing farmers income. In some districts a significant increase in the income was observed through off season vegetable cultivation (Box 3) while the box 4 depicts the orgenic forming and horticultrul activities in Bider, a doement district;

Box: 3

Doubling income through off season vegetable cultivation: A case of Kota KVK

The farmer Sh. Jai Prakash of village Arjunpura, Kota was predominantly engaged in cultivation of potato and vegetables. Sh. Jai Prakash has felt that cultivation of seasonal vegetables is gradually becoming less profitable as compared to off season cultivation. Therefore he wanted new approaches which will provide more income than the seasonal vegetables. Finally he contacted KVK scientists and was ready to grow bitter guard and sponge guard in low tunnel technology. He had established drip irrigation system in his field and also adopted mulching. First year he started the cultivation on 0.2 ha land under low tunnel. He earned Rs 50000 out of sale of bitter guard in month of February to April. Earlier he got 10-15 thousand rupees from the same field for sowing normal season crop. Now he further started exotic vegetables in his farm. His earning has just become double after the intervention of KVK.

Box: 4

Case of Agricultural Turn-Around in Bidar

The agrarian picture of this rainfed district was totally transformed in recent years with the dissemination of technologies propagated by KVK. Now, the district is pioneer in organic farming, horticultural activities, bringing out new varieties of sugarcane crops. Many progressive farmers are groomed in Bidar, otherwise known as arid, drought and dormant district in agriculture.

box 5 discusses about enhancement in the income of farmers has also been witnessed through introduction of intercropping in various regions. In the North eastern region of Meghalya where agricultural land is hilly, introduction of intercropping by KVKs has helped the farmer in increasing income. Having encouraged to see the impact , other farmers also expressed their willingness to adopt intercropping of maiz and beans.

Diversifaication in farming activities propagated through transfer of technical know-how and training to farmers by KVKs has also led to improved earnings therby improved quality of life.

Box: 5

Impact of Intercropping: KVK East Khasi Hills

The introduction of intercropping of French Bean with Maize during the year 2012 had been very successful. The particular progressive farmer was able to enhance her income level from the harvest of two crops from the same area during the year. An average of 3.2 tonnes per hectare of maize was harvested at a rate of Rs. 12 per kg with a return of Rs. 43532.00. The average yield of french bean was 6.7 tonnes per hectare at a rate of Rs. 20 per kg giving a return of Rs. 133960.00. The total cost of cultivation for both the crops was Rs. 58948.72 and the net return was Rs. 113543.28 with a Benefit cost ratio of 3:01. The introduction of intercropping French bean in maize proved successful where French bean provided a good source of additional income apart from the main crop and this motivated the farmer to continue this. Witnessing the success of this practice, other farmers in the vicinity are also willing to follow this intercropping.

5.3.1 Impact of Vocational Training

KVKs are imparting vocational training programmes also. Participation of farmers, youth and women has been presented in Table 5.2 of this chapter. Various training programmes for value addition in fruits, vegetables & millets; low cost nutritious food; tailoring; etc. help farming community to start their own enterprises. This adds to the income of farmers. Table 4 below provides vocational training programmes organized by KVKs and number of trainees who started new enterprise or strengthened the existing one. It is highly encouraging to note that there is not only wide participation of farmers, youth and women in the training programmes but very good outcome is also visible through entrepreneurship development. During the discussion in the sampled KVKs, beneficiaries also revealed a positive impact of such training. It was observed during the personal visits in some of the districts where women received training in value addition of farm produce have started their own businesses for example an interaction with those women who had undergone vocational training of KVK Chittoor-II revealed that many of them have started their own venture of self employment. They attribute an earning of Rs.10,000 to 15,000 to the vocational training which they obtained in value addition from the KVK. Beneficiaries also expressed that the knowledge imparted and guidance provided by KVK to start the enterprise helped them in improving their quality of life with enhanced income. Table 5.5 reflects that in all 26,502 vocational training programmes were organized by KVKs during the period under consideration and 1,23,395 trained persons started either new enterprise or strengthened their existing enterprise which is quite encouraging so far as contribution of KVKs is concerned.

Table 5.5: Distribution of KVKs by their Performance in Vocational Training

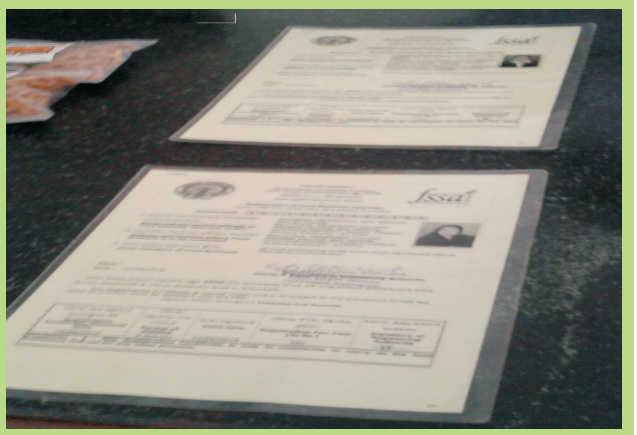
ATARI	States	Number of	
		Vocantionl Training Programmes Organised	No. of Trainees who started new Enterprise/strengthened their enterprises
Ludhiana	1. Himachal Pradesh	416	2362
	2. Jammu & Kashmir	324	2206
	3. Punjab	1410	6070
	4. Uttarakhand	339	0616
Jodhpur	5. Delhi	057	0053
	6. Haryana	1578	17346
	7. Rajasthan	658	3950
Kanpur	8. Uttar Pradesh	7470	23413
Patna	9. Bihar	2114	9051
	10. Jharkhand	1607	6296
Kolkata	11. A. & N. Islands	113	0173
	12. Odisha	729	2423
	13. West Bengal	1448	6212
Guwahati	14. Assam	273	0799

	15. Arunachal Pradesh	082	0049
	16. Sikkim	280	1368
Barapani	17. Manipur	171	0441
	18. Meghalaya	081	0436
	19. Mizoram	087	0603
	20. Nagaland	096	0566
	21. Tripura	061	0256
Pune	22. Goa	018	0045
	23. Gujarat	436	2511
	24. Maharashtra	1692	9598
Jabalpur	25. Chhattisgarh	1047	3895
	26. Madhya Pradesh	1092	5019
Hyderabad	27. Andhra Pradesh	512	1883
	28. Puducherry	009	0025
	29. Tamil Nadu	688	3505
	30. Telangana	419	1623
Bengaluru	31. Karnataka	543	6075
	32. Kerala	652	4527
	All India Total	**26502**	**123395**

Box: 6

***Successful Entrepreneurs : A case of* KVK Chittoor II**

The KVK has made a significant step towards entrepreneurial development especially for farm women . Food processing and value addition are the two major initiatives which highly attracted women. They are processing and producing packed food items from the traditional grains which is getting much significance from the customers. They are getting good orders from the shop keepers. This activity is getting expansion among the women groups in the surrounding areas. One of the main reason for this success is that the KVK is guiding the women group to get certification of their products with FSSAI. Even banks are coming forward to help these women groups to expand their activities.



A Glimpse of interaction with women entrepreneurs and their product in Chittoor

Another success story about value addition training provided by KVK Pune II is given in box 7 below.

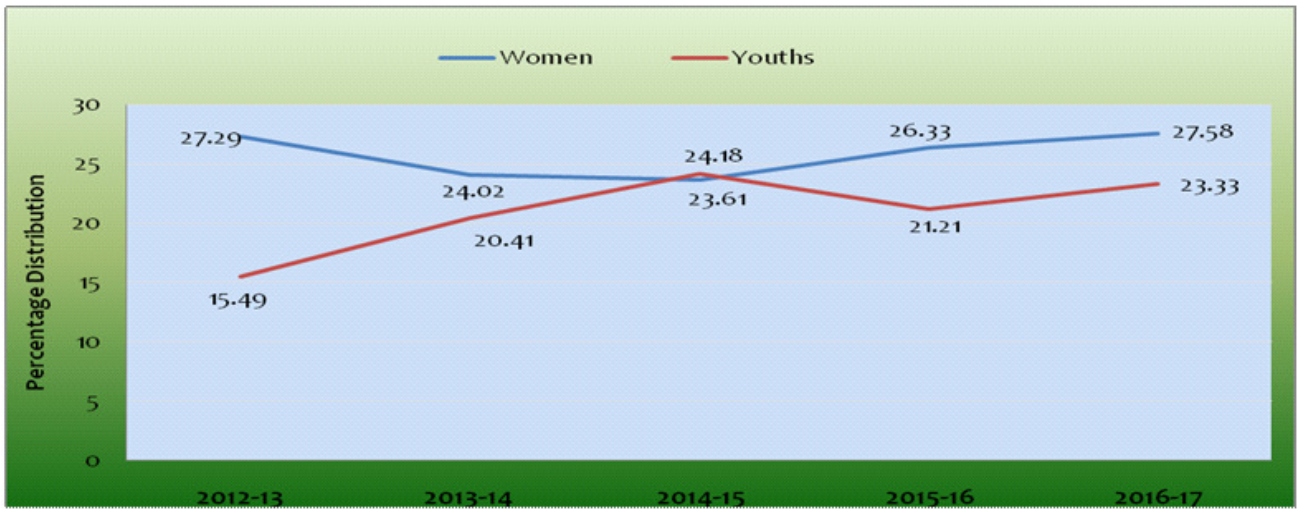
Box: 7

Food Processing and Value Addition: A case of KVK Pune II

After taking training on preparation of different types of spice powders Mrs. Baby Deshmuk came forward to start Masala Products. The technical guidance regarding production, packaging and labeling was also provided through KVK.She earns around Rs. 9000 to 10000/- per month exclusively from spice powder production. Now she has become a model to other self help groups by establishing a food processing unit in the name of Vimal Food Products by the brand name of Rutugandha. In November 2015 she got award of Innovative Agri Entrepreneur by Krishithon Nashik (Human Foundation and Media Exhibitors). She employed another 3 women in her business

It was observed that more and more women and youth were starting new enterprises. Trend in participation of youth and women during 2012-13 to 2016-17 is presented in Figure 5.5.

Figure 5.5: Women and Youth participation in Training



The above figure shows that participation of women is more than that of youth. Our visit to KVKs also confirmed this trend.

5.3.2 Value Addition Units established in the Jurisdiction of KVK

The survey revealed that 8,933 Minimal Processing and Value Addition Units were established in the District during the last five years with guidance/support from KVK. This is also the reflection of contribution made by KVKs in the farmers' life as value addition units provide wage employment as well as self opportunities to farmers in the coverage area.

Table 5.6: Distribution of KVKs by Value addition Units established in the Coverage Area

ATARI	States	No. of Value Addition/ Processing Units establishedin the KVK's Jurisdiction
Ludhiana	Himachal Pradesh	199
	Jammu & Kashmir	036
	Punjab	112
	Uttarakhand	061
Jodhpur	Delhi	007
	Haryana	089
	Rajasthan	538

Kanpur	Uttar Pradesh	1195
Patna	Bihar	706
	Jharkhand	183
Kolkata	A. & N. Islands	011
	Odisha	207
	West Bengal	205
Guwahati	Assam	097
	Arunachal Pradesh	002
	Sikkim	041
Barapani	Manipur	036
	Meghalaya	016
	Mizoram	062
	Nagaland	016
	Tripura	005
Pune	Goa	016
	Gujarat	110
	Maharashtra	1555
Jabalpur	Chhattisgarh	057
	Madhya Pradesh	2175
Hyderabad	Andhra Pradesh	209
	Puducherry	015
	Tamil Nadu	259
	Telangana	162
Bengaluru	Karnataka	270
	Kerala	281
	All India Total	**8933**

5.3.3 Natural Resource Management

With a lot of emphasis on soil health management and water harvesting, KVKs are playing an active role in this field. For soil health management, KVKs are not only doing soil tests and issuing soil health cards but also helping in establishment of vermi-compost units in the district. They are propagating the use of organic fertilizers and advising farmers to start their own vermi compost units. Table 5.7 below depicts that 84,889 vermi-compost units were established in the country with the guidance of 625 surveyed KVKs i.e on an average per KVK about 136 units were established.Many farmers who got training from KVks have started their own vermin compost units while some are selling the organic manures to other farmers.

Table 5.7: Distribution of KVKs by Vermi-Compost Units Established in the Districts

ATARI	States	No. of Vermi-Compost Units established in the KVK's Jurisdictions
Ludhiana	Himachal Pradesh	3847
	Jammu & Kashmir	0719
	Punjab	0233
	Uttarakhand	1267
Jodhpur	Delhi	0003
	Haryana	0397
	Rajasthan	5058
Kanpur	Uttar Pradesh	6142
Patna	Bihar	13073
	Jharkhand	7724
Kolkata	A..& N. Islands	0093
	Odisha	1163
	West Bengal	1407
Guwahati	Assam	1598
	Arunachal Pradesh	0088
	Sikkim	0481
Barapani	Manipur	0152
	Meghalaya	0072
	Mizoram	0175
	Nagaland	0147

	Tripura	0038
Pune	Goa	0024
	Gujarat	0935
	Maharashtra	9005
Jabalpur	Chhattisgarh	0869
	Madhya Pradesh	15884
Hyderabad	Andhra Pradesh	0559
	Puducherry	0024
	Tamil Nadu	1860
	Telangana	2232
Bengaluru	Karnataka	7901
	Kerala	1719
	All India Total	**84889**

Box: 8

Vermi-Composting: A case of KVK Barreily

This 22-year-old Bareilly boy left CA studies to help farmers double their income using vermi-composting. The son of a property dealer in Uttar Pradesh's Bareilly district, Prateek Bajaj almost became a CA and joined his father's business. A lecture on bio-waste management changed his career goals overnight, and today he is the owner of Sehyogi Biotech, a vermin-compost enterprise that impacts hundreds of farmers while cleaning our country.Supplying vermin-compost under the brand name 'Ye Lo Khaad', Prateek's enterprise earns him a turnover of ¹ 12 lakhs every year.It was in 2015, Prateek, then 19 years old, had cleared the CPT exam to get into CA and was doing well in his studies. His elder brother had recently started a dairy farm and was going to training in dairy farming at Krishi Vigyan Kendra, IVRI Izatnagar. Prateek accompanied his brother to the training and learnt the basics of bio waste and vermin-composting. He found it so interesting that he decided to complete the training. He started his own successful enterprise.

5.3.4 Linkage with other Organisations

KVKs are working in coordination with other similar departments which help them in better outreach. KVKs collaborate with Institutions such as State Agriculture Departments, ATMA, NABARD, IARI, Khadi and village Industries, Indian Institute of Horticulture, Central Food Technology Institute, Rice Research Station etc. They collaborate with these institutes in the area of training, farmers' exposure visits, Krishi Melas and also for undertaking sponsored projects.

Table 5.8: Distribution of KVKs per Linkages with other Institutes and Sponsored Projects

ATARI	States	Number of	
		Institutions KVK has the linkages	No. of Sponsored Projects Undertaken
Ludhiana	Himachal Pradesh	123	073
	Jammu Kashmir	158	039
	Punjab	247	073
	Uttarakhand	135	037
Jodhpur	Delhi	16	005
	Haryana	223	043
	Rajasthan	600	193
Kanpur	Uttar Pradesh	758	226
Patna	Bihar	551	225
	Jharkhand	220	100

Kolkata	A. & N. Islands	28	010
	Odisha	288	173
	West Bengal	326	193
Guwahati	Assam	358	139
	Arunachal Pradesh	179	014
	Sikkim	40	011
Barapani	Manipur	95	036
	Meghalaya	100	022
	Mizoram	94	050
	Nagaland	98	065
	Tripura	44	049
Pune	Goa	38	001
	Gujarat	420	203
	Maharashtra	776	266
Jabalpur	Chhattisgarh	125	218
	Madhya Pradesh	366	396
Hyderabad	Andhra Pradesh	209	151
	Puducherry	45	012
	Tamil Nadu	573	192
	Telangana	207	109
Bengaluru	Karnataka	455	324
	Kerala	367	137
	All India Total	**8262**	**3785**

It is observed during the study period that on an average KVKs are having linkages with 13 institutes and they are working on 6 sponsored projects (Table 5.8). The collaboration and linkages on the one hand help in generating financial resources through sponsored projects and on the other in further up-scaling of the technology. Linkage with Allied Departments may also promote a holistic model for agricultural growth in the District.

KVKs outreach shows their contact with grass root level farming community. Area under cropping which included Cereals, Pulses, and Horticulture showed remarkable change after the interventions/ dissemination of technology by KVKs which increased by about 75 percent during last five years. An encouraging participation was observed in the training programmes organized by KVKs. During the discussion in the sampled KVKs, beneficiaries' attributed an earning of Rs.10, 000 to 15,000 to the vocational training which they attended in value addition . Establishment of 8,933 Minimal Processing and Value Addition Units in the District during the last five years with guidance/support from KVK is also reflection of this. Further the interaction with the beneficiaries revealed that the knowledge imparted and guidance provided to start the enterprise by KVK helped them in improving their quality of life with enhanced income. Establishment of 84889 vermi compost units is an appreciable contribution of KVKs in maintaining soil health. As per the above results, it is concluded that KVKs have significantly registered a positive impact.

CHAPTER VI

OUTCOME OF FIELD VISITS

For an in-depth analysis of the performance of KVKs, inputs from Zonal offices are also important along with interaction with KVKs. Zonal Coordination Units are under the Plan Scheme of ICAR which was upgraded as eight Zonal Project Directorate Units (ZPDs). During the 12th Five Year Plan, ZPD was renamed as Agriculture Technology Application Research Institutes (ATARIs). ATARIs are coordinating and monitoring the technology application and Frontline Extension Education Programmes and are also strengthening the Agricultural Extension Research and Knowledge Management.

As part of the ranking study, discussions were held with all the 11 ATARIs and inputs were sought regarding the rank assigned to individual KVKs falling under the respective Zones. Two KVKs each from the 4 categories (A, B, C and D) per zone were selected for an in-depth analysis of their functioning and performance. Information was collected on resources available, KVKs' activities in relation to technology transfer, constraints under which KVKs are functioning, assessment of the impact of their activities on the farmers' income and their suggestions for improved performance. This chapter is devoted to the information/feedback received from respective KVKs on the above mentioned aspects.

In all 61 KVKs including some KVKs recommended by ATARIs (***Details of KVKs visted is placed in Annexure F***) were visited for physical verification. For the purpose, a sample was drawn from 8 ATARIs which existed at the time when the study was awarded to NILERD. From each of the four categories 2 KVKs from each ATARI Zone were selected for the visit. Since most of the KVKs were under first two categories, in category C and D the number of KVKs was less than 2 in some zones, hence in these zones, less than 2 KVKs were visited in these categories. List of KVKs visited by the team is given in Table 6.1.

Table 6.1: ATARI-wise list of KVKs visited for Impact Assessment/Verification

ATARI	States Covered	KVK visited as per the Rank Category			
		A	B	C	D
Ludhiana	1. Delhi 2. Haryana 3. Jammu Kashmir 4. Punjab	1.Ambala 2.Ludhiana	1. S. W. Delhi 2.Karnal	1.Srinagar	1.Hisar
Jodhpur	5. Gujarat 6. Rajasthan	3. Amreli 4. Kota 5. Jodhpur I*	3. Baruch 4. Rajkot	2. Sawai Madhopur 3. Jaisalmer I 4. Bundi*	2. Jodhpur II 3. Jaisalmer II
Kanpur	7. Uttarakhand 8. Uttar Pradesh	6. Nainital 7. Mathura 8. Bagheswar*	5.Almora 6. Bagpat	5. Hamirpur 6. Bareilly	4. Mahoba
Kolkata	9. Bihar 10. Jharkhand 11. West BEngal	9. Howrah 10. Gaya 11. Nalanda*	7. Samastipur 8. Patna* 9. Palamu	7. Vaishali 8. Garhwa	-
Barapani	12. Arunachal Pradesh 13. Assam 14. Manipur 15. Meghalaya 16. Nagaland	12. East Khasi Hills 13. Imphal East 14. Kamrup*	10. Darrang 11. Kohima	9. Udalguri 10. Upper Subansiri	-
Hyderabad	17. Andhra Pradesh 18. Maharashtra 19. Telengana	15. Chittoor I 16. Rangareddy 17. Pune II*	12. Chittoor II 13. Aurangabad II	11.Guntoor 12.Warangal II	5. Gondia
Jabalpur	20. Madhya Pradesh 21. Odisha	18. Jabalpur 19. Narshingpur*	14. Ganjam I 15. Katni	13. Ganjam II 14 Sundargarh II	-

		20. Puri			
Bengaluru	22. Goa	21. Bidar	16. Nagapattinam	15. Karaikal	-
	23. Karnataka	22. Ernakulam	17. Alappuzha	16. South Goa	
	24. Kerala		18. Ramanagara*		
	25. Puducherry				
	26. Tamil Nadu				

Together 61 KVKs from 26 States were personally visited for vetting of the data (22 A Category KVKs, 18 B Category KVKs, 16 C Category KVKs and 5 D Category KVKs)
* Note: KVKs were visited as suggested by ATARI Directors

6. 1. Outcome of Interaction with ATARIs

6.1.1 Views of ATARIs on Positioning of KVKs in the Assigned Rank

General observations of some of the Director's of ATARI are that, some well performing KVKs are not good in documentation while some of the KVKs are very good in documentation and presentation. As some of the KVKs have excellent track record which is not refelected in their rank, indicates that the information was not shared fully by these KVKs regarding their achievements as per the objectives of the study. It was further highlighted that the ranking tool mostly relied upon the quantitative data reported by KVKs but there is no option to capture the qualitative data while assigning the rank. It was brought out by some of the ATARI Heads that those aspects such as technical competence of KVKs, their responsiveness (time taken), innovativeness, finance and administrative management etc. should also be reflected in the ranking. There are cases of KVKs with non-compliance with ATARIs even after frequent reminders. NILERD team explained that questionnaires were designed to elicit qualitative and quantitative data, and care was taken to convert the information in to a tangible, quantifiable data.

While awarding the rank to individual KVK, weightage should be given on local/regional condition. It was brought out that the KVKs in north-eastern region have issues related to their location as connectivity is a problem in this region. Cost of inputs is also very high in some regions; hence, minimum price of the produce of farmers should be kept region-specific. Since large number of KVKs are under state government ownership in north eastern region, there are certain administrative problems – state government is not able to provide facilities as per the MOU such as electricity, water supply etc.

6.1.2 Issues/Constraints faced by KVKs in performing the mandated activities

It emerged during the discussion with ATARIs that KVKs are under different host organizations having varied recruitment and promotion policies, while their mandate is same. As of now, there is no uniform service rule for the KVKs falling under various management types – no pay parity or uniform promotion policy etc. There should be uniform service rules for all KVKs and appropriate service rules should be mentioned in the respective MOU. Due to unattractive service rules many technical staff leave job as and when they get better option which creates vacuum.

There is a problem in the administration of State owned KVKs. As has been discussed, that State Government is not providing basic infrastructure and KVKs are suffering on this account. While allocating KVKs to any host institution, ICAR may ensure that the host institution is able to provide basic requirements as per MoU.

While highlighting the issues, some of the ATARI Directors expressed that lack of infrastructure, human resource (as posts remain vacant for longer duration) and lack of financial independence are the major impediments for poor performance of the KVKs. Even KVKs under the local administration and control of ICAR are lacking the infrastructure. It also emerged during the discussion that in spite of having poor infrastructure, some of the KVKs are performing their mandates well. Close examination of the ranking done by NILERD revealed that, though deficient in infrastructure, KVKs are performing their mandated activities to the satisfactory level.

As far as strength of staff is concerned, at present, KVKs have the total staff strength of sixteen consisting of one Programme Coordinator, six Subject Matter Specialists (SMSs), three Programme Assistants and six Supporting Staff. Now since with passage of time the workload of KVKs has increased manifold, additional staff must be allocated to KVKs. The staff strucuture and pattern was fixed decades ago keeping in view the working condition at that time. Now it is time to revisit the structure. Strengthening of KVK with qualified manpower is essential as they are functioning for knowledge sharing and technology application in agriculture and allied sectors.

There are some Hierarchical issues as Heads of KVKs have to interact with Heads of Line Departments ,pay scale of Head of KVK and Director of line department are same in many cases. To overcome this, separate recruitment rules/elevating the position of Programme Coordinators may be done.

People from few disciplines are repeatedly accommodated whereas other disciplines do not find a place. If people from diverse disciplines are available, KVKs will be able to handle diversified tasks related to their mandate.

KVKs handle multiple tasks, for instance, even some of the tasks which are to be performed by Line Department are assigned to KVKs. State Agriculture Universities utilize KVKs' Subject Matter Specialists for the duties which are supposed to be performed by the University faculty. This has a bearing on performance of KVKs as far as their mandated activities are concerned. Although KVKs do limited soil testing, with one laboratory, they should concentrate on their core competencies such as OFT, FLD and training. Nowadays skill training is being imparted by KVKs. Due to multiple tasks assigned to KVKs, the core and specialized activities of KVKs is getting diluted, affecting the overall functioning of KVKs.

More funds are needed to create infrastructure and for modernization of the existing infrastructure. Budget needs to be increased on technical heads. Maximum part of the budget consists of salary component. If the budget is increased suitably, KVK's potentiality can be exploited fully.

6.1.3 Monitoring of KVKs

Internal monitoring system of KVKs has to be strengthened. ATARI Directors may be authorized to develop their own monitoring system on the similar lines as exists in ICAR. There has to be a separate cell for monitoring. Financial support for monitoring may be provided to KVKs. Shortage of staff was also noticed at ATARIs specially at newly created ATARIs. This is hamering their functioning. It was noticed that KVK performance is linked with the continuity/regular appointment of Heads of these Institutes. There has to be a system that ensures continuity of responsibilities with change over of PCs.

6.2. Outcome of Interaction with KVKs

As has been mentioned in the earlier section, team visits were undertaken to substantiate the ranking in the 2 KVKs of each category of each Zone. The focus group discussions with KVKs' staff, farmers and other beneficiaries were held to understand the activities being performed by KVKs and the facilities available to them. An effort was also made to understand the constraints faced by the KVKs. The outcome of interaction with 61 KVKs visited has been presented in the following section.

In general, it was observed that all the KVKs are performing their mandated activities in order to meet the requirements of transforming the farming community. While there are some differences in the volume of activities performed by each KVK, their mandated activities have reached to farmers in most of the districts. Category-wise brief highlights of the KVKs' performance are presented in the following paragraphs.

6.2.1 Positioning of KVKs in Category A

In all, there are 266 KVKs in this category A. As per the mandate, 22 KVKs positioned in Category A were visited by the team. KVKs at Kamrup, Pune-II and Jaipur-II, Nalanda, Narsinghpur were also visited as suggested by ATARI Directors. The highlights of the results are as follows:

It is pertinent to mention at this juncture that most of the KVKs falling under category A were established prior to 2005. All the KVKs were involved in their mandated activities. Their focus areas included rainfed agriculture and farming systems; soil moisture conservation measures; high yielding drought tolerant varieties; cost reduction technologies in major crops, quality seed production, integrated nutrient/pest management, protective cultivation of horticulture crops, introduction of high yielding/quality cereals, oilseed, pulses, vegetables, flowers, poultry, ducks, establishment of custom hiring centres, production of quality seedlings/saplings etc.

It was observed the Frontline Demonstrations are being conducted at farmer's field to educate the farmers to adopt the new varieties, technologies and methods with the help of these demonstrations. The KVK scientists also visit the field of the farmers, advise them on phone whenever there is a pest or disease outbreak or any other problem related to agriculture.

Short and long duration trainings to the farmers including farm women are also conducted to educate them for adopting the recommended practices. Farmers are also provided vocational trainings on dairy farming, Integrated Farming System, seed production, bee-keeping, preservation of fruits and vegetables, fish farming, home science and nutrition, vermi-composting etc. to make them self-employed. Some of the KVKs are also providing skill training in nutrition for farm women and adolescent girls. This has led to primary benefits such as enhancement of income of women as some of them are marketing their produce and reduction in nutritional problems of the farming women and adolescent.

Majority of the KVKs in this category are better placed with demonstration units and farm land for technical demonstration. These KVKs deserved to be in the top category of the Rank as per their performance. However, it was noticed that in few KVKs under this category, infrastructure was not available as per norms including office building, boundary wall, staff quarters, hostels, equipments etc. Some KVKs are functioning in rented accommodations and have no place for display or organization of trainings. Besides these constraints, with the help of host organization they are delivering services to farmers. For example, KVK, East Khasi Hills, a KVK in top category is functioning in State Department's building since it doesn't have its own building. KVK located in Puri district of Odisha also doesn't have any building of its own yet it is performing the mandated activities and found its place in category A. A unique example in this category is KVK, Ernakulam which was set up long back near the sea. The distance of sea was more than a kilometer away but now that the sea is shifting towards the KVK, the road leading to KVK is full of sand due to which the staff has to walk on sand for 1 kilometer daily to reach office. Sometimes when there is a high tide they have to walk on shallow water of sea. Farmers restrain from going to KVK due to this difficulty but still they expressed their satisfaction as besides locational disadvantage (as it is close to sea) scientists are undertaking demonstration at the farmers field and solving their problems over phone. Most of the KVKs have developed Whatsapp group of farmers.

KVK staff expressed that they were getting good support from their host organization and conducting training etc. using infrastructure of the host organization.

It is interesting to note that those KVKs which are well connected and having infrastructure performed very well and their outreach is visible in the villages. The KVKs owned by NGOs that are involved in various welfare activities including farming, have an added advantage and there are visible and tangible outcome of interventions of KVKs

It was observed that some of the KVKs of this category have utilized their award money to modernize their infrastructure. KVK Kamrup is an example in this regard. The award money for their best performance at National Level was utilized for renovation of Training Halls and Farmers' Hostel Building by the KVKs.

6. 2.2 Positioning of KVKs in Category B

As has been mentioned in the beginning of this chapter, from each category, 2 KVKs falling under eight Zones were surveyed physically by the study team. Table 6.1 provides the list of KVKs visited in this rank. The highlights of the results of 18 KVKs visited are as follows:

Major emphasis of the surveyed KVKs of category B was on Integrated Farming System, Integrated Nutrient Management, Integrated Pest and Disease Management, Crop Diversification, Animal Health and Feed Management, Entrepreneurship training, Bee-keeping, Dairy processing, value addition, Terrace farming, Kitchen gardening, Fish farming, Home Science and nutrition, Vermi-composting, fodder management, etc.

Some of the KVKs in this rank were established long back in 1976 while some were very young and established as recently as in 2012. It was observed that some of the newly established KVKs are not having their own building. Due to lack of infrastructure quite a few KVKs have been positioned at the lower side of the rank. Some of these deserved to be in better position so far as their performance is concerned. For example, KVK Chittor-II is functioning in a rented building since its commencement and the team was informed that the KVK has changed its venue 5 times since its commencement and still it has produced good entrepreneurs through training in value addition. It was observed that this KVK had been allotted sizable land by the State Government but it is difficult to convert this land into usable land as the land is rocky. Some part of the land is already converted into few demonstration units with huge expenditure. It is an arid and rocky land, so water is also a major concern. Another such example is KVK Ganjam-I (KVK, Brahampur) which was established in 2012. Except farm land the KVK is not having any other infrastructure and is operating in a rented building. For conducting the farmers' training the KVK is using the venue of agriculture department. The farm land has been developed as sample farm for training and display to farmers. The entire farm related demonstration unit has been well developed and kept for demonstration. The KVK team has made good efforts and showed their performance with the available resources.

After the visit it was noticed that Ramnagara (Karnataka) and Alleppy (Kerala) KVKs are also doing very good work in their areas and serving farmers and are having very good infrastructure. They fell in category B may be due to some reporting issues related to the information sought for ranking. KVK Delhi is promoting horticultural products and exotic vegetables. They are doing a good job as far as spread of awareness about nutrition is concerned .The KVK team goes to schools and educates children about nutrition during nutritional week. Nursing students and farmers from other states also come for training. Being a KVK surrounded by urban area, it provides a lot of entrepreneurial training and has produced many successful entrepreneurs. The SMSs disseminate information and interact through media like AIR, TV etc.

6. 2.3 Positioning of KVKs in Category C and D

The team visited 16 KVKs in category C and 5 KVKs in category D (see Table 6.1). At the outset, it was observed by the NILERD team that, on various aspects there are tangible and visible outcomes with these KVKs. All the KVKs are performing their regular activities of FLDs, OFTs, entrepreneurial training programmes and also visiting farmers and interacting with them through various means to solve their day to day problems. It was observed during the field visits that there are significant activities at par with the other KVKs (i.e., KVKs falling in A & B categories). The performance & outcome is explicitly visible and considerable numbers of success models were also showcased to the visiting team from NILERD. Actual scenario is analysed at the field

level, keeping in view the relatively low grades obtained by these KVKs and it was found that these KVKs are also delivering services up to the expectations of farmers and the results are tangible at the field level. However, they were dragged into low grades due to some pull factors as illustrated below.

There are leadership crises (discontinuity of leadership) at KVKs due to frequent transfer of Head/ Project Coordinators. A second-rung leadership has to be in place with a well-defined hierarchy and accountability in the absence of Head/PC. Perhaps this is one reason for such poor ranking of KVKs in spite of comparable and tangible outputs generated by these KVKs. Most of these KVKs are poor in documentation of their activities and could not present their activities in a comprehensible manner which can be translated into points/weights. As a result, they are falling in C & D Category KVK. It was noticed that KVK Hissar is an award winning KVK but has been placed in category D due to poor reporting of performances. It was also confirmed through cross-checking with ATARIs that there was under-reporting by few KVKs due to non-seriousness in filling the questionnaire of the study. Lack of physical infrastructure especially in new KVKs was the major issue. Some KVKs reported that there is no vehicle for the KVK since inception and hiring of vehicle for day-to-day work of KVK becomes too costly.Non mandated activities,reporting mechanism and documentation work have increased which consumes considerable time of the scientists. KVK Ganjam-II highlighted that laboratory facilities is not up to the mark to manage the demand of the farmers.

6.3 Issues/Constraints faced by KVKs in performing the mandated activities

There are several internal as well as external issues/constraints with KVKs which hamper their performance. These are highlighted below.

As has been observed, KVKs are committed to carry out their mandated activities laid down by the ICAR. However, the pressure of conducting the programmes of line departments of the State Government hinders the execution of their mandated activities and adds extra workload on the scientists. It has been noticed that most of the miscellaneous activities driven by the State Government machinery and operated by District Collector are imposed on KVKs. Swasthya Abhiyan Mission is one such example. The ineffectiveness of the above functionaries is badly affecting the KVKs in performing their mandated roles and responsibilities. The majority of the core duties of ATMA is thrust upon KVK system. If KVKs are exempted from other 'duties' then they would be able to focus on their core activities more effectively. However, it also emerged that KVKs are having a lot of coordination with the line departments at district/village level.

Some of the KVKs also face a lot of political interference causing inconvenience in effective execution of their mandated work. Host institution assigns several other activities to KVKs.

Further, the main function of KVKs, that is, transfer of new technology at field level gets hampered due to limited staff strength. It has been observed that substantial time of the KVK staff is devoted to compliance to various departments for sending the reports etc.. In addition to this, KVKs have to maintain the huge demonstration unit/ farm land under them which is another constraint. It was highlighted that to maintain the farm land there is a need for labourers on daily wage basis for which budget provision is required.

Vacant positions are major hurdles in the way of effective performance. Even in A category KVKs, it was observed that vacant positions are hampering the functioning of these institutes. Some more scientists are required in the KVKs in Veterinary, Soil Science, Meteorological fields for smooth functioning.

There is no well-established information system/database preserved at KVK for retrieval of information which is a perennial problem for KVK. Some of the SMSs are being trained on voluntary basis to handle the huge database of KVK. There is a need for appointing and training of at least one Data Entry Operator who is well versed with the data handling, entry, documentation and retrieval of such data/information. This problem is more visible in C &

D category KVKs. This has also led to under-reporting of information by some KVKs in response to the questionnaires of the present study.

It was further highlighted during the visit that financial autonomy to Project Coordinators may facilitate the functioning of KVKs and enhance their overall effectiveness.

Funds are required for maintenance of the physical infrastructure in KVKs which were established long back. Additional financial support for buying latest farm equipments/tools and development of some more demonstration units is needed. There is a lot of demand for custom hiring centres of implements at KVKs by farmers. Due to paucity of funds KVKs are not being able to maintain this centre. Only some KVKs under some schemes e.g. NABARD scheme are maintaining a custom hiring centre. At least 25 per cent increase in the budget for technical works is required to cover more farmers under the centre

Improving the facilities for seed storage at KVK may reduce the post-harvesting loss of seeds. Funds are required for the establishment of seed grading unit at KVK which may be utilized by the farmers of attached villages . Establishment of grading unit may be of great help in doubling the farmers' income.

Some of the KVKs are emphasizing on organic farming, it emerged that certification of organic products is needed for popularizing organic products, which is costly to obtain. Some subsidy may be provided to farmers for obtaining this certificate. Some markets may be identified for organic products to motivate farmers to venture into organic farming.

KVKs under SAUs have issues related to allocation of responsibilities as many a times the staff works interchangeably with university staff.

Soil Testing Lab with the latest equipments and technicians is also one of the basic requirements at the KVK. There should be periodic training facilities for the technicians at KVK.

Some of the KVKs located in North Eastern region expressed that Government is emphasizing on soil testing and there is a lot of awareness amongst farmers regarding the importance of soil testing. Celebration of Soil Day has added to the awareness regarding soil testing. On the one hand, there is no separate soil testing lab and on the other, chemicals required for testing reach KVK after the expiry date. Only budget allocation for mandated activities is not enough to meet the farmers' requirements. Prevailing production condition in the district, economic conditions, low level of literacy, high cost of inputs, high wage rates are some of the major constraints in the way of realizing KVK's actual impact.

6.3.1 Issues of KVKs falling in the hilly terrain region

In hilly regions, there is a major problem of wild animals destroying the farms. Farmers are incurring heavy losses due to this problem. KVKs have no scientific solution to this problem in the remote and hilly areas. Due to small landholdings of households in hilly regions, Community Farming is the best solution to achieve better yield, resource conservation etc. KVK is convincing farmers for community farming which is implemented in few pockets successfully. However, it could not be scaled-up due to resistance from farmers. KVK has to focus on educating small size-holding farmers to rope into community farming/cluster farming. Integrated farming is in practice in many places in the hilly region. However, farmers are facing many challenges and could not scale-up their operations. In the case of dairy farming, the cattle strength is limited in number due to many environmental problems.

6.4 Issues in Adoption of Technology by Farmers

Adoption of technology transfer by KVK depends on several factors. The mindset of the farmers hampers adoption of new techniques especially among marginal and small farmers. Low education level, non-availability of

low cost technologies, lack of forward and backward linkages especially post-harvesting management, marketing and value addition, natural calamities, government policies, lack of accessibility of inputs are some of the factors which hamper adoption of new technology. In hilly regions difficult geographical conditions, least density of population, resource crunch etc. require special allocation to reach the farming community. In these regions, geographical location hinders the adoption of new technology.

It was highlighted that increasing labour cost in some of the districts has also become a constraint. If small farm implements are available on hiring basis, this will facilitate farmers. Due to financial constraints at KVK, complete mechanization and keeping up of the latest machineries and equipments at KVK is not possible. However, steps taken by the KVK towards the welfare of the farming community has been widely accepted and followed by the farmers in the district. Adoption of organic farming is an issue as KVK staff informed there is a wide network of dealers of chemical fertilizers spread in every village and are influencing farmers.

Small-holding farmers who have no access to Institutional Lending, PSU Banks, and who have taken loans from local money-lenders/private banks are the worst-hit with the prices dropping to rock-bottom at the market yard. Apart from not getting return from the investment, the farmers have to bear the burden of debt, heavy compound interests from local /money-lenders. They are caught in the vicious circle of organized dealers controlling the price and exploitative input dealers etc. The problem is further confounding woes of small farmers, especially those who have taken the farm-land on lease from the original farm-owner. These farmers are deprived of government subsidies, liberal bank loans, apart from paying to the original owner the hefty amount for each acre of land leased for farming. Most of the distress situation is faced by this type of poor farmers who are dependent on the leased farms. This is also a deterrent on adoption of new technology.

6.5 Views of Farming Community at the field level on Information Accessibility

Upon interaction with farmers it was found that there are parallel channels like input-cum-output agents, NGOs, market-driven agents, line departments, apart from KVKs working in districts right up to the village-field level. The information disseminated by KVKs is most reliable, authentic and not driven by any motives unlike the other private sources as stated above. Here, it is noteworthy to record that there is a significant shift in extension services accessed/sourced from KVKs by farmers. The KVKs are playing a greater role in extension services, especially in vital inputs/information on resource conservation techniques, optimal use of fertilizers/pesticides, increased use of organic methods, bio-fertilisers, animal feed, using local resources etc.

6.6 Views of SMSs of KVKs on Information Dissemination

There are broadly two channels of communication/information dissemination at the district level:

(i) Government financed/controlled agencies, Line Departments, and KVKs. KVK takes the lead in all responsibilities of information dissemination.

(ii) Private Agencies like input-output agents, MNC representatives are thrusting their products on farmers, NGOs directly/indirectly supported by the private players to push their agenda.

The KVKs are straddled with the problem of convincing the farmers to rely on the information sourced from government channels like KVK, ATMA etc. However, the private agencies are dominating due to various reasons such as (a) outreach of the private agencies to the field through various other agencies / NGOs, (b) liberal debt-financing, post-paid services integrated and aligned with the yield of the farmers. This is very clearly visible and ascertained by the SMSs at field level that the farmers are lured by the so-called credit facility of inputs marketed by MNC franchisees/retail shops and rely more on the information/advice of agents rather than KVK.

Farmers are also driven by many other compulsions such as liberal loans, effective networking with NGOs and other private sources supported by MNCs etc. Small farmers are the major chunk of this farming community yielding to these private agencies, the main reason of which is the absence of credit facility and lack of transparent mechanism by PSU Banks / Cooperative Banks. On the other hand, the private agencies are readily giving loans to the small farmers, albeit with high interest rate and thereby pushing their own information on agricultural practices, which suit the private businesses. This has led to rampant use of inputs such as fertilizers, pesticides. In some cases, the crops were heavily damaged due to inter-cropping practices and wrong information given to innocent farmers. There were also incidents of crop-burning due to heavy dosage of insecticides. This is a great challenge on SMS-Scientists working at field level, hence, KVKs have to deal with these added challenges at the village level through convincing each and every farmer about the ill effects of such factors.

6.7 Creating Opportunities for Youth/Women Entrepreneurs: Demand-Driven Services by KVKs

Every KVK has a support mechanism for the village folks in general and farmers in particular in the areas of creating opportunities for women/youth. There is a dedicated SMS in Home Science and this Unit is integrated with other activities to exploit the local resources and opportunities. There are many untapped opportunities which can be exploited to generate income and employment for women in particular, as illustrated in the following examples:

i) Marketing of Soya-milk, soya-cakes that can supplement dairy milk and paneer.

ii) Preparing Fruit jam, Pickle, Papad, Namkeen, Millet and Ragi biscuits etc.

iii) Basket-making, bamboo products

iv) Nutrition & supplements to be supplied to Anganwadis

v) School Uniforms, dress-making etc.

KVK has huge potential in the above areas for developing training programmes and establishing market linkage with nearby towns/cities. Already KVKs are doing commendable work in the above areas by developing training modules and imparting training to women folks.

However, KVKs have to expedite their efforts in the above areas by (i) tapping maximum number of villages and maximum households, (ii) establishing linkages between producers from villages, Local Banks/Co-operative Banks and Marketers/Agents from urban areas. KVK can act as a vehicle in pushing through the marketing strategies to create demand for the above products.

Data analysis from all the KVKs have revealed that significant number of training programmes have yielded good results by transforming few young trainee beneficiaries into young entrepreneurs. In general, at least 10 per cent of the beneficiaries have turned out as entrepreneurs as a result of training & orientation classes.

6.7.1 Convergence of activities with similar Departments

KVKs under the State Government Department of Agriculture are having complete convergence of activities. For example, KVK East Khasi Hills reported that periodic meetings are held between these line departments for the betterment of the farmers. Reaching the entire farming community is the responsibility of the line departments for which KVK may extend technical support. KVKs reported an edge over other organizations in providing technology services in terms of having demonstration units, team of technical experts in varying disciplines, advice to the farmers under one umbrella, use of ICT and provision of mobile advisory services.

It was informed during the Focus Group Discussion that adoption of technology disseminated by the farmers depends on – prevailing production condition in the district, economic conditions, level of literacy, cost of inputs,

wage rate, marketing facilities of the crops and getting support prices, availability of timely credit facility at reasonable interest rates, availability of required inputs at farmers' level,availability of labourers during peak times, and small and fragmented holdings. KVKs located in difficult terrains expressed that connectivity also has a great impact on adoption of technology.

6.7.2 Increasing farmers' Income

By adopting the demonstrated technologies such as Integrated farming system, Integrated pest and Disease Management, Integrated nutrient management, mechanization & processing and value addition, farmers' income may be doubled. Similarly, KVK is undertaking entrepreneurship development activities that may double the income of the farmers. Role of fellow farmers is important in horizontal spread of the new technology.

6.7.3 Creation of Information System for Minimum Support Price (MSP) - Need of the Hour to Rescue Farmers

Present Scenario of Free Market Dynamics vis-à-vis Remunerative Price to Farm Produce:

Upon interaction with farmers in all the districts cutting across all the regions/zones/states, the farmers have expressed their frustration about not getting remunerative price for their produce, particularly in the cases of horticultural and commercial produce. In the case of Seasonal Fruits, Onion, Tomato, Potato, Ginger, Cotton, Chilli etc. the farmers are distressed lot for not getting least price. It is a well-established fact that there is an unscrupulous and nefarious nexus among the traders, marketers/businessmen. As a result, the farmers are not getting even the cost of transportation of the produce for bringing it to the market yard all the way from the field. Farmers are trapped in a precarious situation at the market yards – being far away from their villages they can't even take back their produce which is a very costly affair and the poor farmers are left with no choice but to throw their produce on roads and in drains or burn their hard-earned crops on the roads. A good storage system may reduce the problem.

After synthesizing the feedback from all categories of KVKs throughout India, the following points emerged with reference to the services rendered by KVKs:

i. There is a shift from supply-driven services to demand-driven services with the bottom-up model, taking into account the needs and priorities of farmers with right mix of qualitative and quantitative information provided by KVKs. All the mandated activities are centered around local conditions with a focus on farmer-driven and farm-led activities.

ii. KVKs are documenting, capturing, modifying and scaling-up the local innovations/practices to expand to the other areas. There are many ingenuous farming practices that were documented, fine-tuned, scaled-up to the commercially viable level and disseminated to the farming communities in general.

iii. Creating Check-Dams as part of Water Conservation Methods: In all the agro-climatic regions of arid and semi-arid nature, there is heavy demand for check-dams due to shortage of rain-fall and depletion of water table. Local farmers are looking at KVKs to facilitate and develop methods for creating check-dams to store water during rainy season, and thereby elevate the water table of the fields. KVKs can play a leading role in coordinating with the local governments and providing technical support in preserving and creating new check-dams. This activity can be integrated with the person-days created from NREGS at local level.

iv. Challenges and Possible Solutions through Technology

As a result of the above prevailing situation, the farmers are looking at KVK, Agricultural Scientists, Technocrats for solutions to mitigate their problems and to ensure fair and reasonable prices for their produce in order to

absorb all the input costs and cost of money borrowed. Other than few select items of cereals & pulses, there is no MSP for the agricultural produce. Most of the produce is vulnerable to extreme price fluctuations and do not guarantee any fixed price at the time of selling.

This situation can be tackled effectively with the application of Information Technology (IT) by developing an Information System(IS) at the district level and integrating the information of each district as a whole. The scientists from across the specializations like Agriculture, IT, Software, Weather Forecasting, Economists/ Econometricians can come together and find out certain models for each/specific crop and for each district (by considering the district as a unit) by taking into account the yield of such produce which are vulnerable to steep fluctuations in pricing. These models can take into account the following parameters which determine the pricing structure, i.e.

(i) previous years' yield

(ii) previous years' prices

(iii) previous data of exports & imports

(iv) total acreage of farming in the previous years

(v) expected coverage of crop in acreage in the next two years

(vi) next two years' weather forecasting,

(vii) expected exports and imports

(viii) expected demand/consumption in the market; and

(ix) expected input costs associated with the particular crop

With the above parameters, it is expected to draw a linkage between supply and demand of various produce. Further, integrating this demand-supply matrix with other districts, a regional/zonal integrated information system can be developed for each crop that can synchronize the demand and supply of the district/zone/region. This synchronization will ensure not only minimum support price (MSP) but also assure farmers at the time of sowing the seeds that they will get a guaranteed price for their commodities after successful cropping and yield after a specified period of time.

Although it is a theoretical framework, it is possible to happen in the near future with the convergence of data (as specified above) and with collective efforts of scientific and technical expertise of Agricultural Scientists, IT Professionals, Weather Forecasting Scientists, Economists and Econometricians working on pricing policies.

CHAPTER VII

SALIENT FINDINGS AND RECOMMENDATIONS

7.1 Drivers of Performance Measurement

625 KVKs were subjected to close examination, vis-à-vis the preceding five years information emanating out of each of them. These KVKs are spread across the himalayan region, elevated and plateau regions, fertile river basins, arid and semi-arid regions covering the vast diversity of agro-climatic conditions. Obviously, the KVKs are functioning under the multitude of conditions and constraints and there cannot be a single yardstick to measure the performance outcomes. Documentation of performance and identification of such variables of measurement of performance, bringing parity and uniformity of these measurable factors in a rational, judicious way are great challenges. Under these conditions of high degree of heterogeneity, and dissimilar natural conditions, gauging KVKs' performance is a great challenge. For example, the network of motor-worthy roads and accessibility to each village from the district headquarters was discounted as every KVK is placed in an unequal, incomprehensible position. Similarly, there are plethoras of factors driving the agrarian dynamics of a district as a unit. Therefore, all such issues were deliberately taken out of assessment after disintegrating and delineating all these environmental, explicit factors which are out of the sphere of performance beyond the evaluation and immune to the governance set-up.

Against this background, a comprehensive list of tangible, explicitly measurable and factors at par and uniformly applicable to all the KVKs are identified for assessing the performance levels of KVKs. Thus, the data obtained from all KVKs is very comprehensive in terms of all the documentable, tangible, and explicitly measurable information. Further, based on the in-depth significance of these data, weights (points) were allocated in a rational and judicious way after brainstorming with ICAR. Information of subjective and descriptive nature was also adjudged and translated into material and unambiguous data which was later placed at par and along with the objective data-set.

7.1.1 Ranking of KVKs- Effective Method of Performance Evaluation

All the qualitative and quantitative database collected from KVKs is categorized into four major groups, i.e., (i) infrastructure, (ii) mandated activities, (iii) impact of mandated activities, (iv) allied activities and accolades. On the basis of the above data, the ranking based on the following factors was made:

(a) Overall ranking of performance by taking into account of all the above four factors.

(b) Performance on Core Activities which took note of all mandated activities and their impact by way of outcomes.

(c) Status of infrastructure

Thus, the ranks on the above broad variables were made into four types, i.e., "A", "B", "C", & "D" in the descending order of performance, with "A" rank attributing to the best and outstanding performance, and "D" rank needing urgent attention for improvement. Further, these ranks are compared by arranging them in a matrix format as a function of (a) type of management, (b) period of establishment, (c) Zone-wise, and inter-state comparison. Within the performance based on core activities, the causes impacting and the inter-relationship and impinging effects among the above factors such as (i) infrastructure versus mandated activities, or type of management (ii) core activities versus type of management or period of establishment, (iii) Zonal and Inter-State variations etc. were analysed. The findings of all combinations and permutations of inter-relationships among the

variables were analysed to explore the solutions in order to bring such KVKs who are relatively lagging behind (who got C &D ranks) to put them on par with remaining KVKs. Some of the focus areas brought out of the ranks and their analysis is presented here.

7.1.2 Outcome of Ranks, Focus Areas, and Follow-up Actions Needed:

Ranking based on Overall Performance and Core Activities: More than 91% of the KVKs obtained A+B ranks put together. There are only 7 KVKs (contributing to mere 1% of all KVKs) falling in D category. There needs to be a special focus on these KVKs to improve their performance. They need to be examined from the point of weak areas, ie., infrastructure, mandated activities etc., and to be addressed accordingly. 50 KVKs (8% of total KVKs), ranked in "C" may be analysed by type of management, status of ranks in infrastructure, mandated activities etc. to explore causes for lagging behind others. After identifying the reasons, gaps, and areas of improvement, the respective ATARIs may push those KVKs for improvement in those areas. In general, the overall performance or core performance are the collective indicators of their status of infrastructure, and its spin-off effect on mandated activities and the consequent impact on the outcomes at the farm & farmers level etc. Therefore, the ATARIs on the direction and guidance of ICAR shall examine and identify the areas for improvement.

Ranking based on Infrastructure set-up: 59 KVKs (10% of total KVKs) are lagging behind as they got 'D' rank. 190 KVKs (30%) have obtained 'C' rank. These KVKs were further analysed to get indication and signals for policy and remedial measures at the apex level of governance of KVKs. It was found that maximum KVKs under the ATARIs of Guwahati and Barapani are suffering from infrastructural bottlenecks. Significant number of KVKs in the jurisdiction of ATARIs of Patna, Pune, Jodhpur, Jabalpur, Bangalore have obtained 'B' ranks. There is tremendous scope to improve these KVKs in terms of infrastructure, since the infrastructure is directly affecting the performance of mandated activities. Majority of the KVKs, poor in infrastructure are under the management of State Govts. This needs review meetings with State Govts. Many KVKs established during the early period of FYPs (1974-79 & 1980-84) are still in the 'C' category in contrast to the newly established KVKs which are fairly rich in infrastructure. Apart from the above signals there are inter-state variations. All these outcomes have to be reviewed by ICAR.

Ranking based on Mandated Activities: There are no serious inter-zonal disparities among the KVKs in their mandated activities, except the zones of Jodhpur, Pune and Hyderabad. However, on an average, 30% of all the KVKs have obtained 'B' rank which have large scope for improvement. Upon correlating the mandated activities with the type of management, there was no contrasting difference in the type of management. Merely 75% of KVKs under each of the management type have obtained 'A' rank, indicating that all the managements are providing excellent technological support to KVKs. This is a very positive signal. Only, in case of KVKs under PSUs, less number of KVKs are in 'A' category, 33%, for other Educational Institutions with 25% of KVKs are falling in 'B' rank.

7.1.3 Overall Effectiveness and Impact of KVKs – Analysis of Output and Outcome Parameters

It is an obvious phenomenon as stated in the section-1 of this chapter that impact of overall performance has to be drawn out from all the qualitative and quantitative data. The methodology of the study has explored and utilised all the methods within the spectrum of primary & secondary data collection for the preceding five years and field-level subjective analysis through FGDs, brainstorming with SMSs, and other stakeholders. Brief summary of the outcomes and impact on the district agrarian dynamics due to the contributions of KVK system is as follows:

a. 62,300 villages covered are giving an average figure of 100 villages per KVK.

b. 54,400 OFTs, and 302,000 FLDs have been conducted after identifying more than 29,000 problems, and providing technological solutions to 24,000 problems, 14,700 trials have been undertaken for demonstration, and 4800 problems have been referred to Research Institutions.

c. 26,500 Trainings with a coverage of 1,23,000 beneficiaries in the areas of entrepreneurship, women empowerment, employment opportunities in emerging sectors within the farm and non-farm activities were conducted by KVKs

d. KVKs developed close to 9,000 Processing Units for value addition and maximization of profits through farm and post-harvest technologies.

e. Close to 85,000 vermi compost units are contributing to subsidiary income and promotion of organic farming by reducing the fertilizers, pesticides.

f. KVKs established institutional linkage with 8,300 firms/institutes and collaboration in 3,800 projects.

7.2 Key Recommendations

The KVKs are undertaking a large number of programmes to meet the mandate of technology assessment and transfer across the country in the best possible manner. The present set-up is a showcase of technology generated by the National Agricultural Research System (NARS), an ideal platform for adaptive research, at the District level with continuous technology back-stopping, linkage with other line departments, preparation and transfer of technology matrices as per prevailing farming systems and available resource endowments, and above all a feedback loop for NARS. It is therefore recommended that the ICAR may make all out efforts to nurture this institutional set-up under its administrative control for enhancing 'technology' reach with richness to achieve the goal of increased sustainable income of the farmers.

The present ranking of KVKs is based on their performance during the last five years (2012-13 to 2016-17). It is a very happy augury that as per this research study covering 625 KVKs, a very large percentage of them have achieved overall A and B ranking (90.9%) and a miniscule number of KVKs were in C (8.0 %) and D (1.1%) category. Eight (72.7%) out of 11 zones did not have any KVK in D category on the basis of overall ranking. This is a very positive indication that the monitoring, supervision, facilitation and regulatory framework currently implemented by the ICAR through its ATARIs and by the Host Institutions is highly successful in fulfilling the present goals and mandates. Further, it is noteworthy that though over 40% KVKs were in C and D category as per Infrastructure and Manpower Development, yet a very high percentage of KVKs in the overall ranking of A and B category is indicative of the zeal and motivation for work even under odds of Infrastructure & Manpower. With the accelerated encouragement and logistic support from ICAR, there is a high probability that those KVKs which at present have low rankings (though a small per cent) would also eventually improve and escalate to higher ranking in due course of time.

It is expected that once the strength of SMSs is increased along with infrastructure and financial support, the KVK system will be a science-based model of development not only in India but also for the developing countries.

The key recommendations that follow are primarily with the focus on nurturing the system to continue to perform with greater motivation and to ensure that those KVKs which got low rankings (C & D) get special attention to empower them to attain higher ranking.

The recommendations are grouped in five broad areas:

There is a need at the ICAR level to develop a 'Policy Window' for continuous monitoring and taking policy decisions for ensuring long term efficiency of the system.

7.2.1 Policy

- The ICAR Headquarters may come up with a policy paper including road map for up-scaling the KVKs in C & D category. This can preferably be undertaken in the next six months on priority.
- The Director of the concerned ATARIs may be made responsible for arranging apprenticeship for scientific staff. Further, the newly recruited PCs & SMSs must undergo attachment training at KVKs in A category.
- The KVK's scientific staff working under the management of NGOs should be treated at par with the ICAR/SAU staff in terms of age of superannuation, experience benefits and service conditions to attract scientific talent through lateral entry.
- The per cent of KVKs under C and D category ranking were highest for State Government managed followed by SAU managed KVKs and under control of ICAR Institutes. The ICAR may look into the special concerns of these KVKs and take necessary policy initiatives to overcome those.
- The Director of the concerned ATARI may identify the best SMSs who know the system perspective and have the skills to undergo training from the KVKs which have won best KVK award at the national level or in a zone. These SMSs be made responsible for interacting (at least for one week in a month for six months continuously) at the Headquarters of the concerned ATARI with the KVKs falling in C and D ranking. The Council may provide financial support for special TA/DA for the same.

7.2.2 Infrastructure and Manpower

- A large number of KVKs established before 1990s were under C and D ranking on Infrastructure and Manpower parameter. Infrastructure and Manpower availability are the basic strengths for successfully implementing the mandates. Overall, the highest per cent of KVKs in C and D ranking as per Infrastructure and Manpower was in Zone VI (especially in the States of Arunachal Pradesh and Assam); Zone VII (Tripura and Meghalaya); Zone V (Odisha and Andaman & Nicobar Islands); Zone III and Zone II (Delhi and Rajasthan). It is recommended that the ICAR may undertake a special drive for strengthening the Infrastructure. A document may be prepared and submitted for one-time additional grant from the concerned Ministry.
- At the time of study, the percentage of the in-position staff (scientific, technical, and administrative) was 75.8%. Seventeen per cent of the KVKs were having up to three SMSs against the sanctioned strength of six. The KVK scheme being 100% financially supported project from the Central Government, the Council may impress upon the concerned appointing authorities to launch special campaigns for staff recruitment for KVK.

7.2.3 Process

- Each KVK should play an active role in preparation of Strategic Research and Extension Plan (SREP) of the District delineating available resources and the expected outputs for each plan period.
- At present, Director of Extension Education of the SAU has the responsibility of overseeing the Technology Backstopping to KVKs under NGOs in the jurisdiction of the University. In order to make it more effective, it is recommended that the ICAR Institutes' scientists should also be involved, especially in preparation of Technology Matrices suitable for different farming systems prevailing in the Zone.
- Scientific Advisory Committee (SAC) is a forum for preparing Plan of Action and review of the action by involving all the concerned stakeholders. The Council may impress upon the Host Institutions to ensure that SAC meetings are organized every quarter by ensuring participation of all the stakeholders.

- In the near future, Artificial Intelligence (AI) is likely to change the way farming would be practiced. The AI is already an emerging tool to provide information on likelihood of drought, rain and its duration, hailstorm, out-break of pests, soil health condition etc. The SMSs at the KVKs need to be trained and sensitized to integrate and collate such information and come up with customized advisory for a specific farmer on a specific crop.
- The ICAR Division of Agricultural Extension through ATARIs may undertake a series of capacity building training of SMSs to sensitize them about the problem solving skills in a farming system rather than focusing on their area of specialisation.

7.2.4 Technology Assessment and Up-scaling

- The highest per cent of KVKs in C & D ranking as per Technology assessment, dissemination, and training were in Jodhpur zone, followed by Hyderabad and Pune zones. The concerned Director of ATARIs may undertake specific action for strengthening this important mandate.
- There was a very positive change in the annual growth rate of OFTs (from 10.3 percent during 2012-14 to 25.7 percent during 2015-17). However, there was a decrease in the annual growth rate of FLDs and Institutional training, which is a matter of concern. As these activities form the core strength of technology assessment and up-scaling, the ICAR may undertake a critical analysis of these and implement measures for increasing such activities.
- Out of the 13 allied activities undertaken by KVKs during the last five years, there was a decline in the important activities like Animal/Agricultural Camps, *Kissan Goshthis*, Exposure Visits. The Director of the concerned ATARI may impress upon the KVKs to focus on such important activities as well to enhance their outreach.

7.2.5 General Recommendation

- In general, it was noticed that a large percentage of KVKs established during 2010 onwards was lacking in infrastructure and necessary manpower. This aspect being the core strength for implementing the mandate, the Council may undertake a special drive for accelerating this important component of the scheme.

7.3 Additional Recommendations based on Informal Meetings at ICAR Headquarters, ATARIs, KVKs and Farmers

ATARI Level

- A large number of sanctioned posts has not been filled in ATARIs especially in newly created ATARIs. This is hampering their functioning.

KVK Level

- The KVKs under the management of State Governments, especially in the North East, are facing administrative issues which continue to hamper their functioning. The concerned Directors of ATARIs may take up this issue on priority basis.
- A post of Data Entry Operator may be sanctioned for all the KVKs as a policy for data entry, retrieval and documentation.
- KVKs are being saddled with large number of ad-hoc activities imposed by the State Governments, ATMAs, thereby diverting their focus from the mandated activities. Some of the KVKs also voiced about political pressures. There is an urgent need to bring this to the attention of the State Government authorities

that in order to maintain the science-based focus of KVKs, this institution should not be treated as another service arm of the State.

- It was brought out during the visit that some KVKs are still operating from rented buildings though established more than five years ago. The Director of ATARI may undertake this matter on priority basis and accordingly put up a proposal to the ICAR Headquarters.
- As KVKs are providing technology inputs and services to farmers, as a policy matter, every KVK should be provided finance to establish Seed Grading Unit.

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Annexure

Annexure A: List of KVKs as per Overall Ranking on Performance during the last five years

1. ATARI Ludhiana - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Himachal Pradesh	Mandi	A
2.	Himachal Pradesh	Kangra	A
3.	Himachal Pradesh	Una	A
4.	Himachal Pradesh	Sirmaur	A
5.	Himachal Pradesh	Shimla	A
6.	Jammu and Kashmir	Jammu	A
7.	Jammu and Kashmir	Kathua	A
8.	Jammu and Kashmir	Poonch	A
9.	Jammu and Kashmir	Reasi	A
10.	Jammu and Kashmir	Bandipora	A
11.	Punjab	Firozepur	A
12.	Punjab	Bathinda	A
13.	Punjab	Kapurthala	A
14.	Punjab	Fatehgarh Sahib	A
15.	Punjab	Faridkot	A
16.	Punjab	Sangrur	A
17.	Punjab	Ludhiana	A
18.	Punjab	Jalandhar	A
19.	Punjab	Patiala	A
20.	Punjab	Shaheed Bhagat Singh Nagar	A
21.	Punjab	Ropar (Rupnagar)	A
22.	Punjab	Hoshiarpur	A
23.	Punjab	Moga	A
24.	Punjab	Gurdaspur	A
25.	Punjab	Amritsar	A
26.	Uttarakhand	Dehradun	A
27.	Uttarakhand	Uttarkashi	A
28.	Uttarakhand	Pithoragarh	A
29.	Uttarakhand	Haridwar	A
30.	Uttarakhand	Bageshwar	A
31.	Uttarakhand	Nainital	A
32.	Himachal Pradesh	Chamba	B
33.	Himachal Pradesh	Solan	B
34.	Himachal Pradesh	Hamirpur	B
35.	Himachal Pradesh	Bilaspur	B
36.	Himachal Pradesh	Kullu	B
37.	Himachal Pradesh	Kinnaur	B
38.	Himachal Pradesh	Lahaul & Spiti	B
39.	Jammu and Kashmir	Leh	B
40.	Jammu and Kashmir	Pulwama	B
41.	Jammu and Kashmir	Rajouri	B
42.	Jammu and Kashmir	Kargil	B
43.	Jammu and Kashmir	Doda	B
44.	Jammu and Kashmir	Kulgam	B
45.	Jammu and Kashmir	Anantnag	B
46.	Jammu and Kashmir	Kupwara	B
47.	Jammu and Kashmir	Shopian	B
48.	Punjab	Mansa	B
49.	Punjab	Sri Muktsar Sahib	B
50.	Punjab	Barnala	B
51.	Uttarakhand	Champawat	B
52.	Uttarakhand	Rudraprayag	B
53.	Uttarakhand	Udham Singh Nagar	B
54.	Uttarakhand	Pauri Garhwal	B
55.	Uttarakhand	Chamoli	B
56.	Uttarakhand	Almora	B
57.	Jammu and Kashmir	Srinagar	C

58.	Jammu and Kashmir	Budgam	C
59.	Punjab	Tarn Taran	C
60.	Punjab	Sabibjada Ajeet Singh Nagar (Mohali)	C
61.	Uttarakhand	Tehri Garwal	C

D Category KVKs

No KVKs in the ATARI fall under this category

2. ATARI Jodhpur - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Haryana	Gurugram	A
2.	Haryana	Kaithal	A
3.	Haryana	Kurukshetra	A
4.	Haryana	Ambala	A
5.	Haryana	Rewari	A
6.	Haryana	Fatehabad	A
7.	Haryana	Mohindergarh	A
8.	Rajasthan	Jodhpur I	A
9.	Rajasthan	Banswara	A
10.	Rajasthan	Tonk	A
11.	Rajasthan	Kota	A
12.	Delhi	South West Delhi	B
13.	Haryana	Karnal	B
14.	Haryana	Jind	B
15.	Haryana	Yamunanagar	B
16.	Haryana	Sirsa	B
17.	Haryana	Bhiwani	B
18.	Haryana	Panipat	B
19.	Haryana	Rohtak	B
20.	Haryana	Sonipat	B
21.	Haryana	Jhajjar	B
22.	Haryana	Faridabad	B
23.	Rajasthan	Barmer I	B
24.	Rajasthan	Baran	B
25.	Rajasthan	Dholpur	B
26.	Rajasthan	Dungarpur	B
27.	Rajasthan	Rajsamand	B
28.	Rajasthan	Churu I	B
29.	Rajasthan	Sikar	B
30.	Rajasthan	Bhilwara	B
31.	Rajasthan	Sirohi	B
32.	Rajasthan	Bikaner II	B
33.	Rajasthan	Hanumangarh	B
34.	Rajasthan	Bikaner I	B
35.	Rajasthan	Jhunjhunu	B
36.	Rajasthan	Pali	B
37.	Rajasthan	Udaipur	B
38.	Rajasthan	Jhalawar	B
39.	Rajasthan	Sri Ganganagar	C
40.	Rajasthan	Dausa	C
41.	Rajasthan	Hanumangarh	C
42.	Rajasthan	Alwar I	C
43.	Rajasthan	Ajmer	C
44.	Rajasthan	Sawai Madhopur	C
45.	Rajasthan	Alwar II	C
46.	Rajasthan	Karauli	C
47.	Rajasthan	Churu II	C
48.	Rajasthan	Bharatpur	C
49.	Rajasthan	Jaipur I	C
50.	Rajasthan	Pratapgarh	C
51.	Rajasthan	Chittorgarh	C

52.	Rajasthan	Bundi	C
53.	Rajasthan	Barmer II	C
54.	Rajasthan	Jaipur II	C
55.	Rajasthan	Jalore	C
56.	Rajasthan	Jaisalmer I	C
57.	Haryana	Hisar	D
58.	Rajasthan	Jaisalmer II	D
59.	Rajasthan	Nagaur I	D
60.	Rajasthan	NagaurII	D
61.	Rajasthan	Jodhpur II	D

3. ATARI Kanpur - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Uttar Pradesh	Saharanpur	A
2.	Uttar Pradesh	Ghazipur	A
3.	Uttar Pradesh	Meerut	A
4.	Uttar Pradesh	Kushinagar	A
5.	Uttar Pradesh	Muzaffarnagar	A
6.	Uttar Pradesh	Chitrakoot	A
7.	Uttar Pradesh	Pratapgarh	A
8.	Uttar Pradesh	Sitapur I	A
9.	Uttar Pradesh	Basti	A
10.	Uttar Pradesh	Mirzapur	A
11.	Uttar Pradesh	Auraiya	A
12.	Uttar Pradesh	Mathura	A
13.	Uttar Pradesh	Pilibhit	A
14.	Uttar Pradesh	Unnao	A
15.	Uttar Pradesh	Siddharthnagar	A
16.	Uttar Pradesh	Azamgarh	A
17.	Uttar Pradesh	Sultanpur	A
18.	Uttar Pradesh	Ghaziabad	A
19.	Uttar Pradesh	Sant Ravidas Nagar (Bhadohi)	A
20.	Uttar Pradesh	Rampur	A
21.	Uttar Pradesh	Varanasi	A
22.	Uttar Pradesh	Kannauj	A
23.	Uttar Pradesh	Bulandshahr	A
24.	Uttar Pradesh	Kaushambi	A
25.	Uttar Pradesh	Maharajganj	A
26.	Uttar Pradesh	Faizabad	A
27.	Uttar Pradesh	Raebareli	A
28.	Uttar Pradesh	Deoria	B
29.	Uttar Pradesh	Allahabad	B
30.	Uttar Pradesh	Jaunpur	B
31.	Uttar Pradesh	Agra	B
32.	Uttar Pradesh	Aligarh	B
33.	Uttar Pradesh	Sitapur II	B
34.	Uttar Pradesh	Baghpat	B
35.	Uttar Pradesh	Kanpur Dehat	B
36.	Uttar Pradesh	Moradabad	B
37.	Uttar Pradesh	Ambedkar Nagar	B
38.	Uttar Pradesh	Gonda	B
39.	Uttar Pradesh	Ballia	B
40.	Uttar Pradesh	Gautam Budh Nagar	B
41.	Uttar Pradesh	Firozabad	B
42.	Uttar Pradesh	Fatehpur	B
43.	Uttar Pradesh	Lakhimpur Kheri	B
44.	Uttar Pradesh	Barabanki	B
45.	Uttar Pradesh	Badaun	B
46.	Uttar Pradesh	Bijnor	B
47.	Uttar Pradesh	Balrampur	B
48.	Uttar Pradesh	Jhansi	B

49.	Uttar Pradesh	Mau	B
50.	Uttar Pradesh	Shahjahanpur	B
51.	Uttar Pradesh	Lalitpur	B
52.	Uttar Pradesh	Lucknow	B
53.	Uttar Pradesh	Etawah	B
54.	Uttar Pradesh	Etah	B
55.	Uttar Pradesh	Chandauli	B
56.	Uttar Pradesh	Gorakhpur	B
57.	Uttar Pradesh	Mainpuri	B
58.	Uttar Pradesh	Sonbhadra	B
59.	Uttar Pradesh	Hardoi	B
60.	Uttar Pradesh	Hathras	B
61.	Uttar Pradesh	Jalaun	B
62.	Uttar Pradesh	Sant Kabir Nagar	C
63.	Uttar Pradesh	Bahraich	C
64.	Uttar Pradesh	Bareilly	C
65.	Uttar Pradesh	Hamirpur	C
66.	Uttar Pradesh	Banda	C
67.	Uttar Pradesh	Farrukhabad	C
68.	Uttar Pradesh	Mahoba	D

4. ATARI Patna - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Bihar	Saran	A
2.	Bihar	Bhagalpur	A
3.	Bihar	Supaul	A
4.	Bihar	Jehanabad	A
5.	Bihar	Rohtas	A
6.	Bihar	Kishanganj	A
7.	Bihar	Nalanda	A
8.	Bihar	Buxar	A
9.	Bihar	Aurangabad	A
10.	Bihar	Madhepura	A
11.	Bihar	Jamui	A
12.	Bihar	Nawada	A
13.	Bihar	Araria	A
14.	Bihar	Gaya	A
15.	Bihar	Arwal	A
16.	Bihar	Sheikhpura	A
17.	Bihar	Banka	A
18.	Bihar	Purnea	A
19.	Jharkhand	Hazaribag	A
20.	Jharkhand	Gumla	A
21.	Jharkhand	Godda	A
22.	Jharkhand	Ranchi	A
23.	Jharkhand	Koderma	A
24.	Jharkhand	Dumka	A
25.	Jharkhand	Chatra	A
26.	Bihar	Madhubani	B
27.	Bihar	Bhojpur	B
28.	Bihar	Patna	B
29.	Bihar	Saharsa	B
30.	Bihar	Lakhisarai	B
31.	Bihar	Samastipur	B
32.	Bihar	Munger	B
33.	Bihar	Sitamarhi	B
34.	Bihar	Muzaffarpur	B
35.	Bihar	Khagaria	B
36.	Bihar	West Champaran	B
37.	Bihar	Kaimur	B
38.	Bihar	Darbhanga	B

39.	Bihar	East Champaran	B
40.	Bihar	Gopalganj	B
41.	Bihar	Siwan	B
42.	Bihar	Katihar	B
43.	Bihar	Begusarai	B
44.	Bihar	Sheohar	B
45.	Jharkhand	Saraikela - Kharsawan	B
46.	Jharkhand	Deoghar	B
47.	Jharkhand	Bokaro	B
48.	Jharkhand	Palamu	B
49.	Jharkhand	Pakur	B
50.	Jharkhand	East Singhbhum	B
51.	Jharkhand	Sahibganj	B
52.	Jharkhand	Lohardaga	B
53.	Jharkhand	Simdega	B
54.	Jharkhand	Jamtara	B
55.	Jharkhand	Giridih	B
56.	Jharkhand	Dhanbad	B
57.	Jharkhand	West Singhbhum	B
58.	Jharkhand	Latehar	B
59.	Bihar	Vaishali	C
60.	Jharkhand	Garhwa	C

D Category KVKs

No KVKs from the ATARI fall under this category

5. ATARI Kolkata - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Andaman & Nicobar Islands	Sorth Andaman (Port Blair)	A
2.	Odisha	Balasore	A
3.	Odisha	Keonjhar	A
4.	Odisha	Kalahandi	A
5.	Odisha	Jagatsinghpur	A
6.	Odisha	Cuttack	A
7.	Odisha	Jajpur	A
8.	Odisha	Koraput	A
9.	Odisha	Dhenkanal	A
10.	Odisha	Puri	A
11.	Odisha	Khordha	A
12.	Odisha	Bolangir	A
13.	Odisha	Mayurbhanj I	A
14.	Odisha	Nayagarh	A
15.	Odisha	Boadrak	A
16.	Odisha	Subarnapur	A
17.	Odisha	Sundargarh I	A
18.	Odisha	Kandhamal	A
19.	West Bengal	South 24 Parganas	A
20.	West Bengal	Paschim Medinipur (Jhangram)	A
21.	West Bengal	Uttar Dinajpur	A
22.	West Bengal	Purulia	A
23.	West Bengal	North 24 Parganas	A
24.	West Bengal	Howrah	A
25.	West Bengal	Cooch Behar	A
26.	West Bengal	Hooghly	A
27.	West Bengal	Purba Bardhaman	A
28.	West Bengal	Malda	A
29.	West Bengal	Birbhum (Sriniketan)	A
30.	West Bengal	Bankura	A
31.	West Bengal	Jalpaiguri	A
32.	West Bengal	Nadia	A
33.	Odisha	Kendrapara	B
34.	Odisha	Deogarh	B

35.	Odisha	Ganjam I	B
36.	Odisha	Nabarangpur	B
37.	Odisha	Sambalpur	B
38.	Odisha	Rayagada	B
39.	Odisha	Jharsuguda	B
40.	Odisha	Angul	B
41.	Odisha	Boudh	B
42.	Odisha	Nuapada	B
43.	Odisha	Gajpatir	B
44.	Odisha	Bargarh (Bhubaneswar)	B
45.	Odisha	Mayurbhanj II	B
46.	West Bengal	Murshidabad	B
47.	West Bengal	Dakshin Dinajpur	B
48.	West Bengal	Kalimpong	B
49.	Andaman & Nicobar Islands	Nicobar	C
50.	Andaman & Nicobar Islands	North & Middle Andaman	C
51.	Odisha	Sundargarh II	C
52.	Odisha	Malkangiri	C
53.	Odisha	Ganjum II	C

Rank D Category KVKs

No KVKs fall under this category in the ATARI

6. ATARI Guwahati - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Arunachal Pradesh	East Siang (Pasighat)	A
2.	Assam	Kamrup	A
3.	Assam	Golaghat	A
4.	Assam	Nagaon	A
5.	Sikkim	North Sikkim	A
6.	Arunachal Pradesh	West Siang	B
7.	Arunachal Pradesh	Lower Dibang Valley	B
8.	Arunachal Pradesh	East Kameng	B
9.	Arunachal Pradesh	Namsai	B
10.	Arunachal Pradesh	Upper Siang	B
11.	Arunachal Pradesh	Changlang	B
12.	Arunachal Pradesh	West Kameng	B
13.	Arunachal Pradesh	Tirap	B
14.	Arunachal Pradesh	Papum - Pare	B
15.	Arunachal Pradesh	Tawang	B
16.	Assam	Dhemaji	B
17.	Assam	Sonitpur	B
18.	Assam	Jorhat	B
19.	Assam	Hailakandi	B
20.	Assam	Karimganj	B
21.	Assam	Goalpara	B
22.	Assam	Darrang	B
23.	Assam	Lakhimpur	B
24.	Assam	Kokrajhar	B
25.	Assam	Dibrugarh	B
26.	Assam	Chirang	B
27.	Assam	Cachar	B
28.	Assam	Sivasagar	B
29.	Assam	Dhubri	B
30.	Assam	Nalbari	B
31.	Assam	Barpeta	B
32.	Assam	Tinsukia	B
33.	Assam	Karbi Anglong	B
34.	Sikkim	East Sikkim	B
35.	Sikkim	West Sikkim	B

36.	Sikkim	South Sikkim	B
37.	Arunachal Pradesh	Lower Subansiri	C
38.	Arunachal Pradesh	Upper Subansiri	C
39.	Assam	Udalguri	C

D Category KVKs

No KVKs from the ATARI fall under this category

7. ATARI Barapani - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Manipur	Imphal East	A
2.	Manipur	Senapati	A
3.	Meghalaya	Ri Bhoi	A
4.	Meghalaya	East Khasi Hills	A
5.	Mizoram	Mamit	A
6.	Mizoram	Lunglei	A
7.	Mizoram	Serchhip	A
8.	Mizoram	Aizawl	A
9.	Mizoram	Kolasib	A
10.	Nagaland	Mokokchung	A
11.	Nagaland	Dimapur	A
12.	Nagaland	Wokha	A
13.	Nagaland	Mon	A
14.	Tripura	North Tripura	A
15.	Tripura	South Tripura	A
16.	Tripura	Khowai	A
17.	Manipur	Imphal West	B
18.	Manipur	Bishnupur	B
19.	Manipur	Chandel	B
20.	Manipur	Churachandpur	B
21.	Manipur	Thoubal	B
22.	Manipur	Tamenglong	B
23.	Manipur	Ukhrul	B
24.	Meghalaya	West Jaintia Hills	B
25.	Meghalaya	West Khasi Hills	B
26.	Meghalaya	West Garo Hills	B
27.	Mizoram	Siaha (Chhimtuipui)	B
28.	Mizoram	Champhai	B
29.	Mizoram	Lawngtlai	B
30.	Nagaland	Phek	B
31.	Nagaland	Tuensang	B
32.	Nagaland	Zunheboto	B
33.	Nagaland	Longleng	B
34.	Nagaland	Kohima	B
35.	Tripura	Dhalai	B

8. ATARI Jabalpur - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Chhattisgarh	Bastar	A
2.	Chhattisgarh	Raigarh	A
3.	Chhattisgarh	Korea (Baikunthpur)	A
4.	Chhattisgarh	Kanker (Uttar Bastar)	A
5.	Chhattisgarh	Surajpur	A
6.	Chhattisgarh	Rajnandgaon	A
7.	Chhattisgarh	Balrampur	A
8.	Chhattisgarh	Dantewada	A
9.	Chhattisgarh	Narayanpur	A
10.	Chhattisgarh	Janjgir-Champa	A
11.	Madhya Pradesh	Dhar	A

12.	Madhya Pradesh	Morena	A
13.	Madhya Pradesh	Khandwa	A
14.	Madhya Pradesh	Damoh	A
15.	Madhya Pradesh	Gwalior	A
16.	Madhya Pradesh	Jhabua	A
17.	Madhya Pradesh	Dewas	A
18.	Madhya Pradesh	Jabalpur	A
19.	Madhya Pradesh	Sagar	A
20.	Madhya Pradesh	Shahdol	A
21.	Madhya Pradesh	Sehore	A
22.	Madhya Pradesh	Shajapur	A
23.	Madhya Pradesh	Satna	A
24.	Madhya Pradesh	Mandsaur	A
25.	Madhya Pradesh	Ujjain	A
26.	Madhya Pradesh	Datia	A
27.	Madhya Pradesh	Shivpuri	A
28.	Madhya Pradesh	Seoni	A
29.	Madhya Pradesh	Neemuch	A
30.	Madhya Pradesh	Betul	A
31.	Madhya Pradesh	Hoshangabad	A
32.	Madhya Pradesh	Ashoknagar	A
33.	Madhya Pradesh	Guna	A
34.	Madhya Pradesh	Raisen	A
35.	Madhya Pradesh	Rajgarh	A
36.	Madhya Pradesh	Chhindwara	A
37.	Madhya Pradesh	Narsinghpur	A
38.	Madhya Pradesh	Burhanpur	A
39.	Madhya Pradesh	Harda	A
40.	Madhya Pradesh	Indore	A
41.	Madhya Pradesh	Mandla	A
42.	Chhattisgarh	Kabirdham	B
43.	Chhattisgarh	Bijapur	B
44.	Chhattisgarh	Dhamtari	B
45.	Chhattisgarh	Korba	B
46.	Chhattisgarh	Jashpur	B
47.	Chhattisgarh	Balodabazar - Bhatapara	B
48.	Chhattisgarh	Bilaspur	B
49.	Chhattisgarh	Mahasamund	B
50.	Chhattisgarh	Gariaband	B
51.	Chhattisgarh	Durg	B
52.	Madhya Pradesh	Ratlam	B
53.	Madhya Pradesh	Panna	B
54.	Madhya Pradesh	Rewa	B
55.	Madhya Pradesh	Sidhi	B
56.	Madhya Pradesh	Sheopur	B
57.	Madhya Pradesh	Umaria	B
58.	Madhya Pradesh	Katni	B
59.	Madhya Pradesh	Chhatarpur	B
60.	Madhya Pradesh	Tikamgarh	B
61.	Madhya Pradesh	Barwani	B
62.	Madhya Pradesh	Balaghat	B
63.	Madhya Pradesh	Dindori	B
64.	Madhya Pradesh	Bhind	B
65.	Madhya Pradesh	Khargone	B
66.	Madhya Pradesh	Bhopal	B

C and D Category KVKs

No KVKs in the ATARI fall under C and D Rank

9. ATARI Pune - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Gujarat	Amreli	A
2.	Gujarat	Valsad	A
3.	Gujarat	Porbandar	A
4.	Gujarat	Gir Somnath	A
5.	Gujarat	Panchmahal	A
6.	Gujarat	Mehsana	A
7.	Gujarat	Dahod	A
8.	Gujarat	Tapi	A
9.	Maharashtra	Washim	A
10.	Maharashtra	Amravati	A
11.	Maharashtra	Buldhana	A
12.	Maharashtra	Pune I	A
13.	Maharashtra	Nandurbar	A
14.	Maharashtra	Latur	A
15.	Maharashtra	Nashik	A
16.	Maharashtra	Pune II	A
17.	Maharashtra	Ahmednagar I	A
18.	Maharashtra	Palghar (Thane)	A
19.	Maharashtra	Raigad	A
20.	Maharashtra	Solapur I	A
21.	Maharashtra	Beed I	A
22.	Maharashtra	Nanded I	A
23.	Maharashtra	Yavatmal	A
24.	Maharashtra	Akola	A
25.	Maharashtra	Parbhani	A
26.	Maharashtra	Hingoli	A
27.	Maharashtra	Amravati	A
28.	Maharashtra	Sangli	A
29.	Maharashtra	Aurangabad I	A
30.	Maharashtra	Kolhapur	A
31.	Goa	North Goa	B
32.	Gujarat	Kheda	B
33.	Gujarat	Navasari	B
34.	Gujarat	Vadodara	B
35.	Gujarat	Bharuch	B
36.	Gujarat	Dang	B
37.	Gujarat	Kutch	B
38.	Gujarat	Surat	B
39.	Gujarat	Rajkot	B
40.	Gujarat	Patan	B
41.	Gujarat	Rajkot	B
42.	Gujarat	Surendranagar	B
43.	Gujarat	Banaskantha 1	B
44.	Gujarat	Gandhinagar	B
45.	Gujarat	Narmada	B
46.	Gujarat	Ahmedabad	B
47.	Gujarat	Anand	B
48.	Gujarat	Jamnagar	B
49.	Gujarat	Bhavnagar	B
50.	Gujarat	Kutch (Bhuj)	B
51.	Maharashtra	Nagpur	B
52.	Maharashtra	Osmanabad	B
53.	Maharashtra	Dhule	B
54.	Maharashtra	Sindhudurg	B
55.	Maharashtra	Jalna	B
56.	Maharashtra	Ahmednagar II	B
57.	Maharashtra	Jalgaon I (Old)	B
58.	Maharashtra	Bhandara	B

59.	Maharashtra	Nanded II	B
60.	Maharashtra	Gadchiroli	B
61.	Maharashtra	Ratnagiri	B
62.	Maharashtra	Beed	B
63.	Maharashtra	Aurangabad II	B
64.	Maharashtra	Chandrapur	B
65.	Maharashtra	Wardha	B
66.	Maharashtra	Satara I	B
67.	Maharashtra	Solapur II	B
68.	Maharashtra	Nashik	B
69.	Maharashtra	Satara II	B
70.	Maharashtra	Buldhana	B
71.	Goa	South Goa	C
72.	Gujarat	Sabarkantha	C
73.	Maharashtra	Jalgaon II	C
74.	Maharashtra	Gondia	D

10. ATARI Hyderabad- Overall Ranking

Sl. No	State	KVK District	Rank
1.	Andhra Pradesh	Srikakulam	A
2.	Andhra Pradesh	Chittoor I	A
3.	Andhra Pradesh	West Godavari	A
4.	Andhra Pradesh	Krishna	A
5.	Andhra Pradesh	Anantapur	A
6.	Andhra Pradesh	East Godavari	A
7.	Tamil Nadu	Sivagangai	A
8.	Tamil Nadu	Namakkal	A
9.	Tamil Nadu	Coimbatore	A
10.	Tamil Nadu	Ariyalur	A
11.	Tamil Nadu	Erode	A
12.	Tamil Nadu	Dindigul	A
13.	Tamil Nadu	Thiruvarur	A
14.	Tamil Nadu	Perambalur	A
15.	Tamil Nadu	Tiruvallur	A
16.	Tamil Nadu	Dharmapuri	A
17.	Tamil Nadu	Vellore	A
18.	Tamil Nadu	Cuddalore	A
19.	Tamil Nadu	Pudukkottai	A
20.	Telangana	Suryapet	A
21.	Telangana	Ranga Reddy	A
22.	Telangana	Khammam	A
23.	Telangana	Karimnagar	A
24.	Telangana	Mahabubnagar	A
25.	Telangana	Mahabubabad	A
26.	Telangana	Nalgonda	A
27.	Andhra Pradesh	Prakasam	B
28.	Andhra Pradesh	Vizianagaram	B
29.	Andhra Pradesh	YSR District (Kadapa)	B
30.	Andhra Pradesh	Visakhapatnam	B
31.	Andhra Pradesh	Krishna	B
32.	Andhra Pradesh	Anantapur	B
33.	Andhra Pradesh	Nellore	B
34.	Andhra Pradesh	West Godavari	B
35.	Andhra Pradesh	Kurnool	B
36.	Andhra Pradesh	East Godavari	B
37.	Andhra Pradesh	Chittoor II	B
38.	Puducherry	Puducherry	B
39.	Tamil Nadu	Triruvannamalai	B
40.	Tamil Nadu	Virudhunagar	B
41.	Tamil Nadu	Salem	B
42.	Tamil Nadu	Thoothukudi	B

43.	Tamil Nadu	Theni	B
44.	Tamil Nadu	Kancheepuram	B
45.	Tamil Nadu	Tiruchirappalli	B
46.	Tamil Nadu	Villupuram	B
47.	Tamil Nadu	Karur	B
48.	Tamil Nadu	Nagapattinam	B
49.	Tamil Nadu	Kanyakumari	B
50.	Tamil Nadu	Tirunelveli	B
51.	Tamil Nadu	Madurai	B
52.	Tamil Nadu	Ramanathapuram	B
53.	Telangana	Nagarkurnool	B
54.	Telangana	Nizamabad	B
55.	Telangana	Sangareddy	B
56.	Telangana	Adilabad	B
57.	Andhra Pradesh	Guntur	C
58.	Andhra Pradesh	Prakasam	C
59.	Andhra Pradesh	Kurnool	C
60.	Puducherry	Karaikal	C
61.	Tamil Nadu	Krishnagiri	C
62.	Tamil Nadu	Thanjavur	C
63.	Telangana	Peddapalli	C
64.	Telangana	Warangal II	C

D Category KVKs

No KVKs from the Region fall under this category

11. ATARI Bangaluru - Overall Ranking

Sl. No	State	KVK District	Rank
1.	Karnataka	Gadag	A
2.	Karnataka	Mysore	A
3.	Karnataka	Koppal	A
4.	Karnataka	Haveri	A
5.	Karnataka	Dharwad	A
6.	Karnataka	Hassan	A
7.	Karnataka	Kalaburagi II	A
8.	Karnataka	Kalaburagi I	A
9.	Karnataka	Kodagu	A
10.	Karnataka	Chikkamagaluru	A
11.	Karnataka	Raichur	A
12.	Karnataka	Tumakuru I	A
13.	Karnataka	Dakshina Kannada	A
14.	Karnataka	Chamarajanagar	A
15.	Karnataka	Vijayapura	A
16.	Karnataka	Bidar	A
17.	Kerala	Pathanamthitta	A
18.	Kerala	Malappuram	A
19.	Kerala	Kozhikode	A
20.	Kerala	Thiruvananthapuram	A
21.	Kerala	Palakkad	A
22.	Kerala	Ernakulam	A
23.	Karnataka	Mandya	B
24.	Karnataka	Chitradurga	B
25.	Karnataka	Ballari	B
26.	Karnataka	Udupi	B
27.	Karnataka	Bagalkot	B
28.	Karnataka	Belgaum	B
29.	Karnataka	Uttara Kannada	B
30.	Karnataka	Ramanagara	B
31.	Karnataka	Davanagere	B
32.	Karnataka	Belagavi	B
33.	Karnataka	Tumkur II	B

34.	Karnataka	Bengaluru Rural	B
35.	Karnataka	Shivamogga	B
36.	Karnataka	Kolar	B
37.	Kerala	Kollam	B
38.	Kerala	Idukki	B
39.	Kerala	Alappuzha	B
40.	Kerala	Kannur	B
41.	Kerala	Kasaragod	B
42.	Kerala	Thrissur	B
43.	Kerala	Kottayam	B
44.	Kerala	Wayanad	B

C & D Category KVKs

No KVK in the ATARI fall under these categories

Annexure B: List of KVKs as per the Ranking on Performance of Core* Activities during the last five years

(*Summation of Mandated Activities + Effect/Impact/Outcome of Mandated Activities + Allied Activities)

1. ATARI Ludhiana – Core Activities

Sl. No	State	KVK Districts	Rank
1	Himachal Pradesh	Mandi	A
2	Himachal Pradesh	Una	A
3	Himachal Pradesh	Kangra	A
4	Himachal Pradesh	Shimla	A
5	Himachal Pradesh	Sirmaur	A
6	Jammu and Kashmir	Bandipora	A
7	Jammu and Kashmir	Reasi	A
8	Jammu and Kashmir	Poonch	A
9	Jammu and Kashmir	Kathua	A
10	Punjab	Ludhiana	A
11	Punjab	Faridkot	A
12	Punjab	Fatehgarh Sahib	A
13	Punjab	Firozepur	A
14	Punjab	Bathinda	A
15	Punjab	Jalandhar	A
16	Punjab	Kapurthala	A
17	Punjab	Sangrur	A
18	Punjab	Shaheed Bhagat Singh Nagar	A
19	Punjab	Ropar (Rupnagar)	A
20	Punjab	Patiala	A
21	Punjab	Hoshiarpur	A
22	Uttarakhand	Uttarkashi	A
23	Uttarakhand	Dehradun	A
24	Uttarakhand	Pithoragarh	A
25	Uttarakhand	Bageshwar	A
26	Uttarakhand	Haridwar	A
27	Uttarakhand	Nainital	A
28	Uttarakhand	Rudraprayag	A
29	Himachal Pradesh	Bilaspur	B
30	Himachal Pradesh	Kullu	B
31	Himachal Pradesh	Solan	B
32	Himachal Pradesh	Chamba	B
33	Himachal Pradesh	Hamirpur	B
34	Himachal Pradesh	Kinnaur	B
35	Himachal Pradesh	Lahaul & Spiti	B
36	Jammu and Kashmir	Jammu	B
37	Jammu and Kashmir	Leh	B
38	Jammu and Kashmir	Kargil	B
39	Jammu and Kashmir	Pulwama	B
40	Jammu and Kashmir	Anantnag	B
41	Jammu and Kashmir	Doda	B

42	Jammu and Kashmir	Rajouri	B
43	Jammu and Kashmir	Kupwara	B
44	Jammu and Kashmir	Kulgam	B
45	Jammu and Kashmir	Shopian	B
46	Punjab	Amritsar	B
47	Punjab	Mansa	B
48	Punjab	Gurdaspur	B
49	Punjab	Moga	B
50	Punjab	Barnala	B
51	Punjab	Sri Muktsar Sahib	B
52	Punjab	Tarn Taran	B
53	Uttarakhand	Champawat	B
54	Uttarakhand	PauriGarhwal	B
55	Uttarakhand	Udham Singh Nagar	B
56	Uttarakhand	Chamoli	B
57	Uttarakhand	Almora	B
58	Uttarakhand	Tehri Garwal	B
59	Jammu and Kashmir	Budgam	C
60	Jammu and Kashmir	Srinagar	C
61	Punjab	Sahibjada Ajeet Singh Nagar (Mohali)	C

2. ATARI Jodhpur – Core Activities

Sl. No	State	KVK Districts	Rank
1	Haryana	Gurugram	A
2	Haryana	Kurukshetra	A
3	Haryana	Kaithal	A
4	Haryana	Ambala	A
5	Haryana	Fatehabad	A
6	Haryana	Rewari	A
7	Rajasthan	Jodhpur I	A
8	Rajasthan	Banswara	A
9	Rajasthan	Tonk	A
10	Delhi	South West Delhi	B
11	Haryana	Mohindergarh	B
12	Haryana	Yamunanagar	B
13	Haryana	Bhiwani	B
14	Haryana	Jind	B
15	Haryana	Sirsa	B
16	Haryana	Panipat	B
17	Haryana	Jhajjar	B
18	Haryana	Karnal	B
19	Haryana	Sonipat	B
20	Haryana	Rohtak	B
21	Haryana	Faridabad	B
22	Rajasthan	Baran	B
23	Rajasthan	Dholpur	B
24	Rajasthan	Kota	B
25	Rajasthan	Barmer I	B
26	Rajasthan	Dungarpur	B
27	Rajasthan	Rajsamand	B
28	Rajasthan	Churu I	B
29	Rajasthan	Hanumangarh	B
30	Rajasthan	Bhilwara	B
31	Rajasthan	Sirohi	B
32	Rajasthan	Sikar	B
33	Rajasthan	Bikaner II	B
34	Rajasthan	Bikaner I	B
35	Rajasthan	Pali	B
36	Rajasthan	Jhalawar	B
37	Rajasthan	Hanumangarh	B

38	Rajasthan	Jhunjhunu	C
39	Rajasthan	Alwar I	C
40	Rajasthan	Sri Ganganagar	C
41	Rajasthan	Udaipur	C
42	Rajasthan	Alwar II	C
43	Rajasthan	Dausa	C
44	Rajasthan	Ajmer	C
45	Rajasthan	Churu II	C
46	Rajasthan	Sawai Madhopur	C
47	Rajasthan	Karauli	C
48	Rajasthan	Bharatpur	C
49	Rajasthan	Barmer II	C
50	Rajasthan	Jaipur I	C
51	Rajasthan	Pratapgarh	C
52	Rajasthan	Jaipur II	C
53	Rajasthan	Jaisalmer I	C
54	Rajasthan	Bundi	C
55	Rajasthan	Nagaur I	C
56	Rajasthan	Jaisalmer II	C
57	Rajasthan	Jalore	C
58	Rajasthan	Nagaur II	C
59	Haryana	Hisar	D
60	Rajasthan	Chittorgarh	D
61	Rajasthan	Jodhpur II	D

3. ATARI Kanpur – Core Activities

Sl. No	State	KVK Districts	Rank
1	Uttar Pradesh	Saharanpur	A
2	Uttar Pradesh	Ghazipur	A
3	Uttar Pradesh	Meerut	A
4	Uttar Pradesh	Mirzapur	A
5	Uttar Pradesh	Sant Ravidas Nagar (Bhadohi)	A
6	Uttar Pradesh	Kushinagar	A
7	Uttar Pradesh	Muzaffarnagar	A
8	Uttar Pradesh	Sitapur I	A
9	Uttar Pradesh	Pratapgarh	A
10	Uttar Pradesh	Auraiya	A
11	Uttar Pradesh	Azamgarh	A
12	Uttar Pradesh	Basti	A
13	Uttar Pradesh	Pilibhit	A
14	Uttar Pradesh	Unnao	A
15	Uttar Pradesh	Chitrakoot	A
16	Uttar Pradesh	Bulandshahr	A
17	Uttar Pradesh	Maharajganj	A
18	Uttar Pradesh	Deoria	A
19	Uttar Pradesh	Faizabad	A
20	Uttar Pradesh	Sultanpur	A
21	Uttar Pradesh	Siddharthnagar	A
22	Uttar Pradesh	Ghaziabad	A
23	Uttar Pradesh	Kannauj	A
24	Uttar Pradesh	Mathura	A
25	Uttar Pradesh	Varanasi	A
26	Uttar Pradesh	Ambedkar Nagar	A
27	Uttar Pradesh	Raebareli	A
28	Uttar Pradesh	Jaunpur	A
29	Uttar Pradesh	Kaushambi	A
30	Uttar Pradesh	Rampur	A
31	Uttar Pradesh	Allahabad	A
32	Uttar Pradesh	Agra	B
33	Uttar Pradesh	Kanpur Dehat	B
34	Uttar Pradesh	Lakhimpur Kheri	B

35	Uttar Pradesh	Ballia	B
36	Uttar Pradesh	Gautam Budh Nagar	B
37	Uttar Pradesh	Fatehpur	B
38	Uttar Pradesh	Firozabad	B
39	Uttar Pradesh	Sitapur II	B
40	Uttar Pradesh	Aligarh	B
41	Uttar Pradesh	Moradabad	B
42	Uttar Pradesh	Baghpat	B
43	Uttar Pradesh	Gonda	B
44	Uttar Pradesh	Jhansi	B
45	Uttar Pradesh	Balrampur	B
46	Uttar Pradesh	Lalitpur	B
47	Uttar Pradesh	Bijnor	B
48	Uttar Pradesh	Mainpuri	B
49	Uttar Pradesh	Etawah	B
50	Uttar Pradesh	Badaun	B
51	Uttar Pradesh	Mau	B
52	Uttar Pradesh	Barabanki	B
53	Uttar Pradesh	Hardoi	B
54	Uttar Pradesh	Lucknow	B
55	Uttar Pradesh	Gorakhpur	B
56	Uttar Pradesh	Hathras	B
57	Uttar Pradesh	Shahjahanpur	B
58	Uttar Pradesh	Jalaun	B
59	Uttar Pradesh	Sonbhadra	B
60	Uttar Pradesh	Etah	B
61	Uttar Pradesh	Hamirpur	B
62	Uttar Pradesh	SantKabir Nagar	B
63	Uttar Pradesh	Chandauli	B
64	Uttar Pradesh	Bahraich	C
65	Uttar Pradesh	Bareilly	C
66	Uttar Pradesh	Farrukhabad	C
67	Uttar Pradesh	Banda	C
68	Uttar Pradesh	Mahoba	D

4. ATARI Patna – Core Activities

Sl. No	State	KVK Districts	Rank
1	Bihar	Jehanabad	A
2	Bihar	Kishanganj	A
3	Bihar	Bhagalpur	A
4	Bihar	Saran	A
5	Bihar	Nalanda	A
6	Bihar	Aurangabad	A
7	Bihar	Rohtas	A
8	Bihar	Supaul	A
9	Bihar	Madhepura	A
10	Bihar	Buxar	A
11	Bihar	Jamui	A
12	Bihar	Araria	A
13	Bihar	Gaya	A
14	Bihar	Sheikhpura	A
15	Bihar	Arwal	A
16	Bihar	Nawada	A
17	Bihar	Purnea	A
18	Bihar	Banka	A
19	Bihar	Saharsa	A
20	Jharkhand	Hazaribag	A
21	Jharkhand	Ranchi	A
22	Jharkhand	Gumla	A
23	Jharkhand	Dumka	A
24	Jharkhand	Godda	A

25	Jharkhand	Koderma	A
26	Jharkhand	Saraikela - Kharsawan	A
27	Jharkhand	Chatra	A
28	Jharkhand	Bokaro	A
29	Jharkhand	Deoghar	A
30	Bihar	Munger	B
31	Bihar	Bhojpur	B
32	Bihar	Madhubani	B
33	Bihar	Patna	B
34	Bihar	Khagaria	B
35	Bihar	Samastipur	B
36	Bihar	Lakhisarai	B
37	Bihar	Muzaffarpur	B
38	Bihar	Sitamarhi	B
39	Bihar	West Champaran	B
40	Bihar	Kaimur	B
41	Bihar	Darbhanga	B
42	Bihar	East Champaran	B
43	Bihar	Siwan	B
44	Bihar	Gopalganj	B
45	Bihar	Sheohar	B
46	Bihar	Katihar	B
47	Bihar	Begusarai	B
48	Jharkhand	East Singhbhum	B
49	Jharkhand	Palamu	B
50	Jharkhand	Pakur	B
51	Jharkhand	Simdega	B
52	Jharkhand	Sahibganj	B
53	Jharkhand	Lohardaga	B
54	Jharkhand	West Singhbhum	B
55	Jharkhand	Giridih	B
56	Jharkhand	Dhanbad	B
57	Jharkhand	Jamtara	B
58	Jharkhand	Latehar	B
59	Bihar	Vaishali	C
60	Jharkhand	Garhwa	C

5. ATARI Kolkata – Core Activities

Sl. No	State	KVK Districts	Rank
1	Andaman & Nicobar Islands	South Andaman (Port Blair)	A
2	Odisha	Balasore	A
3	Odisha	Jagatsinghpur	A
4	Odisha	Kalahandi	A
5	Odisha	Keonjhar	A
6	Odisha	Bolangir	A
7	Odisha	Cuttack	A
8	Odisha	Dhenkanal	A
9	Odisha	Puri	A
10	Odisha	Jajpur	A
11	Odisha	Koraput	A
12	Odisha	Khordha	A
13	Odisha	Mayurbhanj I	A
14	Odisha	Nayagarh	A
15	Odisha	Bhadrak	A
16	Odisha	Sundargarh I	A
17	Odisha	Subarnapur	A
18	Odisha	Kandhamal	A
19	Odisha	Deogarh	A
20	Odisha	Kendrapara	A
21	Odisha	Nabarangpur	A
22	Odisha	Sambalpur	A

23	West Bengal	Paschim Medinipur (Jhangram)	A
24	West Bengal	South 24 Parganas	A
25	West Bengal	Howrah	A
26	West Bengal	North 24 Parganas	A
27	West Bengal	Uttar Dinajpur	A
28	West Bengal	Purba Bardhaman	A
29	West Bengal	Purulia	A
30	West Bengal	Birbhum (Sriniketan)	A
31	West Bengal	Cooch Behar	A
32	West Bengal	Hooghly	A
33	West Bengal	Malda	A
34	West Bengal	Jalpaiguri	A
35	Andaman & Nicobar Islands	Nicobar	B
36	Odisha	Angul	B
37	Odisha	Ganjam I	B
38	Odisha	Boudh	B
39	Odisha	Jharsuguda	B
40	Odisha	Rayagada	B
41	Odisha	Nuapada	B
42	Odisha	Gajpati	B
43	Odisha	Mayurbhanj II	B
44	Odisha	Bargarh (Bhubaneswar)	B
45	Odisha	Sundargarh II	B
46	Odisha	Malkangiri	B
47	West Bengal	Murshidabad	B
48	West Bengal	Nadia	B
49	West Bengal	Bankura	B
50	West Bengal	Dakshin Dinajpur	B
51	West Bengal	Kalimpong	B
52	Andaman & Nicobar Islands	North & Middle Andaman	C
53	Odisha	Ganjam II	C

6. ATARI Guwahati – Core Activities

Sl. No	State	KVK District	Rank
1	Assam	Kamrup	A
2	Assam	Dhemaji	A
3	Assam	Hailakandi	A
4	Assam	Nagaon	A
5	Assam	Darrang	A
6	Assam	Sonitpur	A
7	Assam	Golaghat	A
8	Assam	Goalpara	A
9	Arunachal Pradesh	East Siang (Pasighat)	A
10	Arunachal Pradesh	Namsai	A
11	Arunachal Pradesh	West Siang	A
12	Arunachal Pradesh	East Kameng	A
13	Arunachal Pradesh	Lower Dibang Valley	A
14	Sikkim	North Sikkim	A
15	Assam	Karimganj	B
16	Assam	Jorhat	B
17	Assam	Dibrugarh	B
18	Assam	Lakhimpur	B
19	Assam	Sivasaga	B
20	Assam	Chirang	B
21	Assam	Kokrajhar	B
22	Assam	Cachar	B
23	Assam	Dhubri	B
24	Assam	Nalbari	B
25	Assam	Barpeta	B
26	Assam	Tinsukia	B
27	Assam	Karbi Anglong	B

28	Arunachal Pradesh	Upper Siang	B
29	Arunachal Pradesh	West Kameng	B
30	Arunachal Pradesh	Changlang	B
31	Arunachal Pradesh	Papum - Pare	B
32	Arunachal Pradesh	Tirap	B
33	Arunachal Pradesh	Tawang	B
34	Arunachal Pradesh	Lower Subansiri	B
35	Sikkim	East Sikkim	B
36	Sikkim	West Sikkim	B
37	Sikkim	South Sikkim	B
38	Assam	Udalguri	C
39	Arunachal Pradesh	Upper Subansiri	C

7. ATARI Barapani – Core Activities

Sl. No	State	KVK Districts	Rank
1	Manipur	Imphal East	A
2	Manipur	Senapati	A
3	Manipur	Chandel	A
4	Manipur	Churachandpur	A
5	Manipur	Imphal West	A
6	Manipur	Tamenglong	A
7	Manipur	Thoubal	A
8	Meghalaya	East Khasi Hills	A
9	Meghalaya	Ri Bhoi	A
10	Meghalaya	West Jaintia Hills	A
11	Meghalaya	West Khasi Hills	A
12	Mizoram	Mamit	A
13	Mizoram	Lunglei	A
14	Mizoram	Aizawl	A
15	Mizoram	Serchhip	A
16	Mizoram	Kolasib	A
17	Nagaland	Mokokchung	A
18	Nagaland	Dimapur	A
19	Nagaland	Mon	A
20	Nagaland	Wokha	A
21	Tripura	North Tripura	A
22	Tripura	Khowai	A
23	Tripura	South Tripura	A
24	Manipur	Bishnupur	B
25	Manipur	Ukhrul	B
26	Meghalaya	West Garo Hills	B
27	Mizoram	Siaha (Chhimtupui)	B
28	Mizoram	Champhai	B
29	Mizoram	Lawngtlai	B
30	Nagaland	Phek	B
31	Nagaland	Tuensang	B
32	Nagaland	Longleng	B
33	Nagaland	Zunheboto	B
34	Nagaland	Kohima	B
35	Tripura	Dhalai	B

8. ATARI Jabalpur – Core Activities

Sl. No	State	KVK Districts	Rank
1	Chhattisgarh	Bastar	A
2	Chhattisgarh	Korea (Baikunthpur)	A
3	Chhattisgarh	Raigarh	A
4	Chhattisgarh	Rajnandgaon	A
5	Chhattisgarh	Kanker (Uttar Bastar)	A
6	Chhattisgarh	Surajpur	A
7	Chhattisgarh	Balrampur	A

8	Chhattisgarh	Narayanpur	A
9	Chhattisgarh	Bijapur	A
10	Chhattisgarh	Janjgir-Champa	A
11	Chhattisgarh	Dantewada	A
12	Chhattisgarh	Kabirdham	A
13	Madhya Pradesh	Damoh	A
14	Madhya Pradesh	Dhar	A
15	Madhya Pradesh	Khandwa	A
16	Madhya Pradesh	Dewas	A
17	Madhya Pradesh	Gwalior	A
18	Madhya Pradesh	Jabalpur	A
19	Madhya Pradesh	Morena	A
20	Madhya Pradesh	Sagar	A
21	Madhya Pradesh	Sehore	A
22	Madhya Pradesh	Shajapur	A
23	Madhya Pradesh	Mandsaur	A
24	Madhya Pradesh	Jhabua	A
25	Madhya Pradesh	Shahdol	A
26	Madhya Pradesh	Hoshangabad	A
27	Madhya Pradesh	Rajgarh	A
28	Madhya Pradesh	Ashoknagar	A
29	Madhya Pradesh	Datia	A
30	Madhya Pradesh	Satna	A
31	Madhya Pradesh	Seoni	A
32	Madhya Pradesh	Neemuch	A
33	Madhya Pradesh	Shivpuri	A
34	Madhya Pradesh	Guna	A
35	Madhya Pradesh	Panna	A
36	Madhya Pradesh	Ujjain	A
37	Madhya Pradesh	Harda	A
38	Madhya Pradesh	Chhindwara	A
39	Madhya Pradesh	Raisen	A
40	Madhya Pradesh	Betul	A
41	Madhya Pradesh	Burhanpur	A
42	Madhya Pradesh	Mandla	A
43	Madhya Pradesh	Narsinghpur	A
44	Madhya Pradesh	Indore	A
45	Madhya Pradesh	Katni	A
46	Madhya Pradesh	Ratlam	A
47	Madhya Pradesh	Rewa	A
48	Madhya Pradesh	Sheopur	A
49	Chhattisgarh	Korba	B
50	Chhattisgarh	Dhamtari	B
51	Chhattisgarh	Jashpur	B
52	Chhattisgarh	Gariaband	B
53	Chhattisgarh	Balodabazar - Bhatapara	B
54	Chhattisgarh	Mahasamund	B
55	Chhattisgarh	Bilaspur	B
56	Chhattisgarh	Durg	B
57	Madhya Pradesh	Barwani	B
58	Madhya Pradesh	Chhatarpur	B
59	Madhya Pradesh	Sidhi	B
60	Madhya Pradesh	Tikamgarh	B
61	Madhya Pradesh	Umaria	B
62	Madhya Pradesh	Bhind	B
63	Madhya Pradesh	Balaghat	B
64	Madhya Pradesh	Dindori	B
65	Madhya Pradesh	Khargone	B
66	Madhya Pradesh	Bhopal	B

9. ATARI Pune – Core Activities

Sl. No	State	KVK Districts	Rank
1	Gujarat	Amreli	A
2	Gujarat	Valsad	A
3	Gujarat	Panchmahal	A
4	Gujarat	Gir Somnath	A
5	Gujarat	Dahod	A
6	Gujarat	Porbandar	A
7	Gujarat	Mehsana	A
8	Gujarat	Tapi	A
9	Maharashtra	Washim	A
10	Maharashtra	Amravati	A
11	Maharashtra	Buldhana	A
12	Maharashtra	Nandurbar	A
13	Maharashtra	Pune I	A
14	Maharashtra	Nashik	A
15	Maharashtra	Raigad	A
16	Maharashtra	Akola	A
17	Maharashtra	Latur	A
18	Maharashtra	Palghar (Thane)	A
19	Maharashtra	Pune II	A
20	Maharashtra	Solapur I	A
21	Maharashtra	Beed I	A
22	Maharashtra	Nanded I	A
23	Maharashtra	Sangli	A
24	Maharashtra	Ahmednagar I	A
25	Maharashtra	Parbhani	A
26	Maharashtra	Hingoli	A
27	Maharashtra	Dhule	A
28	Maharashtra	Osmanabad	A
29	Maharashtra	Ahmednagar II	A
30	Maharashtra	Amravati	A
31	Maharashtra	Sindhudurg	A
32	Maharashtra	Yavatmal	A
33	Goa	North Goa	B
34	Gujarat	Surat	B
35	Gujarat	Rajkot	B
36	Gujarat	Navasari	B
37	Gujarat	Vadodara	B
38	Gujarat	Bharuch	B
39	Gujarat	Kutch (Bhuj)	B
40	Gujarat	Rajkot	B
41	Gujarat	Dang	B
42	Gujarat	Kheda	B
43	Gujarat	Patan	B
44	Gujarat	Ahmedabad	B
45	Gujarat	Banaskantha I	B
46	Gujarat	Surendranagar	B
47	Gujarat	Anand	B
48	Gujarat	Gandhinagar	B
49	Gujarat	Narmada	B
50	Gujarat	Bhavnagar	B
51	Gujarat	Jamnagar	B
52	Gujarat	Kachchh	B
53	Maharashtra	Aurangabad I	B
54	Maharashtra	Kolhapur	B
55	Maharashtra	Nagpur	B
56	Maharashtra	Bhandara	B
57	Maharashtra	Jalgaon I (Old)	B
58	Maharashtra	Jalna	B
59	Maharashtra	Nanded II	B

60	Maharashtra	Gadchiroli	B
61	Maharashtra	Ratnagiri	B
62	Maharashtra	Aurangabad II	B
63	Maharashtra	Beed	B
64	Maharashtra	Chandrapur	B
65	Maharashtra	Wardha	B
66	Maharashtra	Satara I	B
67	Maharashtra	Satara II	B
68	Maharashtra	Solapur II	B
69	Maharashtra	Buldhana	B
70	Goa	South Goa	C
71	Gujarat	Sabarkantha	C
72	Maharashtra	Nashik	C
73	Maharashtra	Jalgaon	C
74	Maharashtra	Gondia	D

10. ATARI Hyderabad – Core Activities

Sl. No	State	KVK District	Rank
1	Andhra Pradesh	Srikakulam	A
2	Andhra Pradesh	Chittoor	A
3	Andhra Pradesh	West Godavari	A
4	Andhra Pradesh	Krishna	A
5	Andhra Pradesh	Anantapur	A
6	Andhra Pradesh	East Godavari	A
7	Andhra Pradesh	Prakasam	A
8	Andhra Pradesh	Vizianagaram	A
9	Tamil Nadu	Sivagangai	A
10	Tamil Nadu	Namakkal	A
11	Tamil Nadu	Ariyalur	A
12	Tamil Nadu	Coimbatore	A
13	Tamil Nadu	Thiruvarur	A
14	Tamil Nadu	Dindigul	A
15	Tamil Nadu	Tiruvallur	A
16	Tamil Nadu	Vellore	A
17	Tamil Nadu	Cuddalore	A
18	Tamil Nadu	Erode	A
19	Tamil Nadu	Perambalur	A
20	Tamil Nadu	Pudukkottai	A
21	Telangana	Ranga Reddy	A
22	Telangana	Suryapet	A
23	Telangana	Mahabubnagar	A
24	Telangana	Khammam	A
25	Telangana	Mahabubabad	A
26	Telangana	Karimnagar	A
27	Telangana	Nalgonda	A
28	Andhra Pradesh	Anantapur	B
29	Andhra Pradesh	Krishna	B
30	Andhra Pradesh	YSR (Kodapa)	B
31	Andhra Pradesh	Nellore	B
32	Andhra Pradesh	Visakhapatnam	B
33	Andhra Pradesh	Chittoor	B
34	Andhra Pradesh	West Godavari	B
35	Andhra Pradesh	East Godavari	B
36	Andhra Pradesh	Kurnool	B
37	Puducherry	Puducherry	B
38	Tamil Nadu	Triruvannamalai	B
39	Tamil Nadu	Virudhunagar	B
40	Tamil Nadu	Dharmapuri	B
41	Tamil Nadu	Salem	B
42	Tamil Nadu	Theni	B
43	Tamil Nadu	Tiruchirappalli	B

44	Tamil Nadu	Kancheepuram	B
45	Tamil Nadu	Kanyakumari	B
46	Tamil Nadu	Thoothukudi	B
47	Tamil Nadu	Villupuram	B
48	Tamil Nadu	Nagapattinam	B
49	Tamil Nadu	Karur	B
50	Tamil Nadu	Tirunelveli	B
51	Tamil Nadu	Ramanathapuram	B
52	Tamil Nadu	Madurai	B
53	Tamil Nadu	Krishnagiri	B
54	Telangana	Nagarkurnool	B
55	Telangana	Nizamabad	B
56	Telangana	Sangareddy	B
57	Telangana	Adilabad	B
58	Andhra Pradesh	Guntur	C
59	Andhra Pradesh	Prakasam	C
60	Andhra Pradesh	Kurnool	C
61	Puducherry	Karaikal	C
62	Tamil Nadu	Thanjavur	C
63	Telangana	Peddapalli	C
64	Telangana	Warangal II	C

11. ATARI Bengaluru – Core Activities

Sl. No	State	KVK District	Rank
1	Karnataka	Gadag	A
2	Karnataka	Koppal	A
3	Karnataka	Haveri	A
4	Karnataka	Kalaburagi II	A
5	Karnataka	Dharwad	A
6	Karnataka	Mysore	A
7	Karnataka	Hassan	A
8	Karnataka	Kalaburagi I	A
9	Karnataka	Dakshina Kannada	A
10	Karnataka	Mandya	A
11	Karnataka	Raichur	A
12	Karnataka	Chamarajanagar	A
13	Karnataka	Kodagu	A
14	Kerala	Pathanamthitta	A
15	Kerala	Palakkad	A
16	Kerala	Kozhikode	A
17	Kerala	Ernakulam	A
18	Kerala	Malappuram	A
19	Kerala	Thiruvananthapuram	A
20	Karnataka	Chikkamagaluru	B
21	Karnataka	Chitradurga	B
22	Karnataka	Tumakuru I	B
23	Karnataka	Bidar	B
24	Karnataka	Vijayapura	B
25	Karnataka	Ballari	B
26	Karnataka	Uttara Kannada	B
27	Karnataka	Bagalkot	B
28	Karnataka	Belagavi	B
29	Karnataka	Belgaum	B
30	Karnataka	Ramanagara	B
31	Karnataka	Udupi	B
32	Karnataka	Davanagere	B
33	Karnataka	Bengaluru Rural	B
34	Karnataka	Kolar	B
35	Karnataka	Shivamogga	B
36	Karnataka	Tumkur II	B
37	Kerala	Idukki	B

38	Kerala	Kollam	B
39	Kerala	Alappuzha	B
40	Kerala	Kasaragod	B
41	Kerala	Kannur	B
42	Kerala	Thrissur	B
43	Kerala	Kottayam	B
44	Kerala	Wayanad	B

Annexure C: List of KVKs as per the Ranking on Infrastructure during the last five years

1. ATARI Ludhiana - Infrastructure

Sl. No	State	KVK District	Rank
1.	Himachal Pradesh	Kangra	A
2.	Himachal Pradesh	Hamirpur	A
3.	Himachal Pradesh	Chamba	A
4.	Jammu & Kashmir	Jammu	A
5.	Punjab	Kapurthala	A
6.	Punjab	Patiala	A
7.	Punjab	Firozepur	A
8.	Punjab	Sangrur	A
9.	Punjab	Moga	A
10.	Punjab	Bathinda	A
11.	Punjab	Gurdaspur	A
12.	Punjab	Hoshiarpur	A
13.	Punjab	Fatehgarh Sahib	A
14.	Punjab	Sri Muktsar Sahib	A
15.	Punjab	Ropar (Rupnagar)	A
16.	Punjab	Shaheed Bhagat Singh Nagar	A
17.	Punjab	Jalandhar	A
18.	Uttarakhand	Dehradun	A
19.	Uttarakhand	Pithoragarh	A
20.	Uttarakhand	Haridwar	A
21.	Uttarakhand	Udham Singh Nagar	A
22.	Himachal Pradesh	Una	B
23.	Himachal Pradesh	Sirmaur	B
24.	Himachal Pradesh	Solan	B
25.	Himachal Pradesh	Mandi	B
26.	Himachal Pradesh	Shimla	B
27.	Himachal Pradesh	Kinnaur	B
28.	Jammu & Kashmir	Rajouri	B
29.	Jammu & Kashmir	Kathua	B
30.	Jammu & Kashmir	Pulwama	B
31.	Jammu & Kashmir	Poonch	B
32.	Jammu & Kashmir	Srinagar	B
33.	Jammu & Kashmir	Reasi	B
34.	Punjab	Faridkot	B
35.	Punjab	Ludhiana	B
36.	Punjab	Amritsar	B
37.	Punjab	Mansa	B
38.	Uttarakhand	Nainital	B
39.	Uttarakhand	Uttarkashi	B
40.	Uttarakhand	Chamoli	B
41.	Uttarakhand	Bageshwar	B
42.	Uttarakhand	Champawat	B
43.	Himachal Pradesh	Bilaspur	C
44.	Himachal Pradesh	Lahaul & Spiti	C
45.	Himachal Pradesh	Kullu	C
46.	Jammu & Kashmir	Kulgam	C
47.	Jammu & Kashmir	Bandipora	C
48.	Jammu & Kashmir	Leh	C
49.	Jammu & Kashmir	Doda	C

50.	Jammu & Kashmir	Kargil	C
51.	Punjab	Barnala	C
52.	Uttarakhand	Rudraprayag	C
53.	Uttarakhand	Pauri Garhwal	C
54.	Uttarakhand	Almora	C
55.	Jammu & Kashmir	Anantnag	D
56.	Jammu & Kashmir	Budgam	D
57.	Jammu & Kashmir	Shopian	D
58.	Jammu & Kashmir	Kupwara	D
59.	Punjab	Sahibjada Ajeet Singh Nagar (Mohali)	D
60.	Punjab	Tarn Taran	D
61.	Uttarakhand	Tehri Garwal	D

2. ATARI Jodhpur - Infrastructure

Sl. No.	State	KVK District	Rank
1.	Haryana	Karnal	A
2.	Haryana	Kaithal	A
3.	Haryana	Gurugram	A
4.	Rajasthan	Jhunjhunu	A
5.	Rajasthan	Banswara	A
6.	Rajasthan	Udaipur	A
7.	Rajasthan	Barmer I	A
8.	Haryana	Rewari	B
9.	Haryana	Rohtak	B
10.	Haryana	Ambala	B
11.	Haryana	Mohindergarh	B
12.	Haryana	Kurukshetra	B
13.	Haryana	Jind	B
14.	Haryana	Sirsa	B
15.	Haryana	Panipat	B
16.	Haryana	Yamunanagar	B
17.	Haryana	Sonipat	B
18.	Rajasthan	Chittorgarh	B
19.	Rajasthan	Churu	B
20.	Rajasthan	Kota	B
21.	Rajasthan	Tonk	B
22.	Rajasthan	Dungarpur	B
23.	Rajasthan	Sikar	B
24.	Rajasthan	Dausa	B
25.	Rajasthan	Rajsamand	B
26.	Rajasthan	Sri Ganganagar	B
27.	Rajasthan	Bikaner II	B
28.	Rajasthan	Sirohi	B
29.	Rajasthan	Bikaner	B
30.	Rajasthan	Bhilwara	B
31.	Rajasthan	Jalore	B
32.	Rajasthan	Jodhpur I	B
33.	Rajasthan	Dholpur	B
34.	Rajasthan	Bundi	B
35.	Rajasthan	Baran	B
36.	Delhi	South West Delhi	C
37.	Haryana	Bhiwani	C
38.	Haryana	Hisar	C
39.	Haryana	Faridabad	C
40.	Haryana	Fatehabad	C
41.	Haryana	Jhajjar	C
42.	Rajasthan	Karauli	C
43.	Rajasthan	Ajmer	C
44.	Rajasthan	Alwar I	C
45.	Rajasthan	Sawai Madhopur	C
46.	Rajasthan	Jaipur I	C

47.	Rajasthan	Nagaur I	C
48.	Rajasthan	Bharatpur	C
49.	Rajasthan	Pali	C
50.	Rajasthan	Jaipur II	C
51.	Rajasthan	Jhalawar	C
52.	Rajasthan	Pratapgarh	C
53.	Rajasthan	Jaisalmer I	D
54.	Rajasthan	Hanumangarh	D
55.	Rajasthan	Churu	D
56.	Rajasthan	Alwar II	D
57.	Rajasthan	Hanumangarh	D
58.	Rajasthan	Barmer II	D
59.	Rajasthan	Nagaur II	D
60.	Rajasthan	Jaisalmer II	D
61.	Rajasthan	Jodhpur II	D

3. ATARI Kanpur - Infrastructure

Sl. No.	State	KVK District	Rank
1.	Uttar Pradesh	Chitrakoot	A
2.	Uttar Pradesh	Mathura	A
3.	Uttar Pradesh	Saharanpur	A
4.	Uttar Pradesh	Kushinagar	A
5.	Uttar Pradesh	Chandauli	A
6.	Uttar Pradesh	Basti	A
7.	Uttar Pradesh	Muzaffarnagar	A
8.	Uttar Pradesh	Siddharthnagar	A
9.	Uttar Pradesh	Barabanki	A
10.	Uttar Pradesh	Pratapgarh	B
11.	Uttar Pradesh	Meerut	B
12.	Uttar Pradesh	Etah	B
13.	Uttar Pradesh	Sultanpur	B
14.	Uttar Pradesh	Ghazipur	B
15.	Uttar Pradesh	Rampur	B
16.	Uttar Pradesh	Shahjahanpur	B
17.	Uttar Pradesh	Kaushambi	B
18.	Uttar Pradesh	Sitapur I	B
19.	Uttar Pradesh	Aligarh	B
20.	Uttar Pradesh	Badaun	B
21.	Uttar Pradesh	Baghpat	B
22.	Uttar Pradesh	Gonda	B
23.	Uttar Pradesh	Ghaziabad	B
24.	Uttar Pradesh	Pilibhit	B
25.	Uttar Pradesh	Unnao	B
26.	Uttar Pradesh	Auraiya	B
27.	Uttar Pradesh	Moradabad	B
28.	Uttar Pradesh	Kannauj	B
29.	Uttar Pradesh	Bareilly	B
30.	Uttar Pradesh	Allahabad	B
31.	Uttar Pradesh	Varanasi	B
32.	Uttar Pradesh	Bijnor	B
33.	Uttar Pradesh	Agra	B
34.	Uttar Pradesh	Sitapur II	C
35.	Uttar Pradesh	Mau	C
36.	Uttar Pradesh	Mirzapur	C
37.	Uttar Pradesh	Raebareli	C
38.	Uttar Pradesh	Ballia	C
39.	Uttar Pradesh	Jaunpur	C
40.	Uttar Pradesh	Azamgarh	C
41.	Uttar Pradesh	Kanpur Dehat	C
42.	Uttar Pradesh	Bahraich	C
43.	Uttar Pradesh	Fatehpur	C

44.	Uttar Pradesh	Gautam Budh Nagar	C
45.	Uttar Pradesh	Sonbhadra	C
46.	Uttar Pradesh	Maharajganj	C
47.	Uttar Pradesh	Lucknow	C
48.	Uttar Pradesh	Balrampur	C
49.	Uttar Pradesh	Faizabad	C
50.	Uttar Pradesh	Bulandshahr	C
51.	Uttar Pradesh	Firozabad	C
52.	Uttar Pradesh	Deoria	C
53.	Uttar Pradesh	Jalaun	C
54.	Uttar Pradesh	Sant Kabir Nagar	C
55.	Uttar Pradesh	Gorakhpur	C
56.	Uttar Pradesh	Banda	C
57.	Uttar Pradesh	Hathras	C
58.	Uttar Pradesh	Etawah	D
59.	Uttar Pradesh	Lakhimpur Kheri	D
60.	Uttar Pradesh	Sant Ravidas Nagar (Bhadohi)	D
61.	Uttar Pradesh	Jhansi	D
62.	Uttar Pradesh	Mahoba	D
63.	Uttar Pradesh	Ambedkar Nagar	D
64.	Uttar Pradesh	Lalitpur	D
65.	Uttar Pradesh	Hamirpur	D
66.	Uttar Pradesh	Hardoi	D
67.	Uttar Pradesh	Farrukhabad	D
68.	Uttar Pradesh	Mainpuri	D

4. ATARI Patna - Infrastructure

Sl. No	State	KVK District	Rank
1.	Bihar	Supaul	A
2.	Bihar	Rohtas	A
3.	Bihar	Saran	A
4.	Bihar	Bhagalpur	A
5.	Bihar	Katihar	A
6.	Bihar	Nawada	A
7.	Jharkhand	Hazaribag	A
8.	Jharkhand	Godda	A
9.	Bihar	Lakhisarai	B
10.	Bihar	Banka	B
11.	Bihar	Jehanabad	B
12.	Bihar	Bhojpur	B
13.	Bihar	Buxar	B
14.	Bihar	Patna	B
15.	Bihar	Madhepura	B
16.	Bihar	Samastipur	B
17.	Bihar	Begusarai	B
18.	Bihar	Madhubani	B
19.	Bihar	Jamui	B
20.	Bihar	East Champaran	B
21.	Bihar	Kishanganj	B
22.	Bihar	Darbhanga	B
23.	Bihar	Nalanda	B
24.	Bihar	Arwal	B
25.	Bihar	Gopalganj	B
26.	Bihar	Vaishali	B
27.	Bihar	Sitamarhi	B
28.	Bihar	Aurangabad	B
29.	Bihar	Gaya	B
30.	Bihar	Araria	B
31.	Jharkhand	Koderma	B
32.	Jharkhand	Gumla	B
33.	Jharkhand	Pakur	B

34.	Jharkhand	Lohardaga	B
35.	Jharkhand	Ranchi	B
36.	Jharkhand	Sahibganj	B
37.	Jharkhand	Jamtara	B
38.	Jharkhand	Palamu	B
39.	Jharkhand	Giridip	B
40.	Jharkhand	Chatra	B
41.	Bihar	Kaimur	C
42.	Bihar	Saharsa	C
43.	Bihar	Muzaffarpur	C
44.	Bihar	Purnea	C
45.	Bihar	Siwan	C
46.	Bihar	Sheikhpura	C
47.	Bihar	Khagaria	C
48.	Bihar	Munger	C
49.	Bihar	West Champaran	C
50.	Bihar	Sheohar	C
51.	Jharkhand	Dhanbad	C
52.	Jharkhand	Bokaro	C
53.	Jharkhand	Dumka	C
54.	Jharkhand	Deoghar	C
55.	Jharkhand	East Singhbhum	C
56.	Jharkhand	West Singhbhum	C
57.	Jharkhand	Latehar	D
58.	Jharkhand	Garhwa	D
59.	Jharkhand	Simdega	D
60.	Jharkhand	Saraikela - Kharsawan	D

5. ATARI Kolkata - Infrastructure

Sl. No.	State	KVK District	Rank
1.	West Bengal	Cooch Behar	A
2.	West Bengal	Uttar Dinajpur	A
3.	West Bengal	Purulia	A
4.	West Bengal	Bankura	A
5.	West Bengal	Hooghly	A
6.	West Bengal	South 24 Parganas	A
7.	West Bengal	Dakshin Dinajpur	A
8.	West Bengal	Nadia	A
9.	Andaman & Nicobar Islands	South Andaman (Port Blair)	B
10.	Odisha	Keonjhar	B
11.	Odisha	Bargarh (Bhubhaneswar)	B
12.	Odisha	Balasore	B
13.	Odisha	Kalahandi	B
14.	Odisha	Kandhamal	B
15.	Odisha	Kendrapara	B
16.	West Bengal	Paschim Medinipur (Jhangram)	B
17.	West Bengal	North 24 Parganas	B
18.	West Bengal	Murshidabad	B
19.	West Bengal	Malda	B
20.	West Bengal	Howrah	B
21.	West Bengal	Jalpaiguri	B
22.	West Bengal	Kalimpong	B
23.	Andaman & Nicobar Islands	North & Middle Andaman	C
24.	Odisha	Subarnapur	C
25.	Odisha	Jajpur	C
26.	Odisha	Ganjam	C
27.	Odisha	Koraput	C
28.	Odisha	Khordha	C
29.	Odisha	Cuttack	C
30.	Odisha	Nuapada	C
31.	Odisha	Deogarh	C

32.	Odisha	Nabarangpur	C
33.	Odisha	Sambalpur	C
34.	Odisha	Mayurbhanj I	C
35.	Odisha	Ganjum	C
36.	Odisha	Bhadrak	C
37.	Odisha	Dhenkanal	C
38.	Odisha	Jagatsinghpur	C
39.	Odisha	Nayagarh	C
40.	Odisha	Gajpati	C
41.	Odisha	Puri	C
42.	Odisha	Rayagada	C
43.	Odisha	Malkangiri	C
44.	Odisha	Jharsuguda	C
45.	Odisha	Sundargarh I	C
46.	West Bengal	Purba Bardhaman	C
47.	West Bengal	Birbhum (Sriniketan)	C
48.	Andaman & Nicobar Islands	Nicobar	D
49.	Odisha	Bolangir	D
50.	Odisha	Boudh	D
51.	Odisha	Mayurbhanj II	D
52.	Odisha	Sundargarh II	D
53.	Odisha	Angul	D

6. ATARI Guwahati - Infrastructure

Sl. No	State	KVK District	Rank
1.	Assam	Golaghat	A
2.	Arunachal Pradesh	Tirap	B
3.	Assam	Kamrup	B
4.	Assam	Jorhat	B
5.	Assam	Nagaon	B
6.	Assam	Chirang	B
7.	Assam	Kokrajhar	B
8.	Sikkim	East Sikkim	B
9.	Sikkim	West Sikkim	B
10.	Sikkim	South Sikkim	B
11.	Arunachal Pradesh	Lower Dibang Valley	C
12.	Arunachal Pradesh	East Kameng	C
13.	Arunachal Pradesh	West Siang	C
14.	Arunachal Pradesh	East Siang (Pasighat)	C
15.	Assam	Sonitpur	C
16.	Assam	Cachar	C
17.	Assam	Barpeta	C
18.	Assam	Lakhimpur	C
19.	Assam	Nalbari	C
20.	Assam	Dibrugarh	C
21.	Assam	Karimganj	C
22.	Assam	Dhubri	C
23.	Assam	Tinsukia	C
24.	Assam	Dhemaji	C
25.	Assam	Goalpara	C
26.	Assam	Sivasagar	C
27.	Assam	Karbi Anglong	C
28.	Sikkim	North Sikkim	C
29.	Arunachal Pradesh	Namsai	D
30.	Arunachal Pradesh	Papum - Pare	D
31.	Arunachal Pradesh	Upper Siang	D
32.	Arunachal Pradesh	Changlang	D
33.	Arunachal Pradesh	Lower Subansiri	D
34.	Arunachal Pradesh	Upper Subansiri	D
35.	Arunachal Pradesh	Tawang	D
36.	Arunachal Pradesh	West Kameng	D

37.	Assam	Udalguri	D
38.	Assam	Hailakandi	D
39.	Assam	Darrang	D

7. ATARI Barapani - Infrastructure

Sl. No	State	KVK District	Rank
1.	Manipur	Bishnupur	B
2.	Manipur	Imphal West	B
3.	Meghalaya	Ri Bhoi	B
4.	Mizoram	Lunglei	B
5.	Mizoram	Mamit	B
6.	Mizoram	Serchhip	B
7.	Mizoram	Kolasib	B
8.	Mizoram	Aizawl	B
9.	Mizoram	Lawngtlai	B
10.	Mizoram	Siaha (Chhimtuipui)	B
11.	Nagaland	Wokha	B
12.	Manipur	Senapati	C
13.	Manipur	Imphal East	C
14.	Manipur	Churachandpur	C
15.	Manipur	Thoubal	C
16.	Manipur	Chandel	C
17.	Meghalaya	West Garo Hills	C
18.	Mizoram	Champhai	C
19.	Nagaland	Dimapur	C
20.	Nagaland	Mokokchung	C
21.	Nagaland	Tuensang	C
22.	Nagaland	Kohima	C
23.	Nagaland	Mon	C
24.	Nagaland	Zunheboto	C
25.	Nagaland	Phek	C
26.	Tripura	South Tripura	C
27.	Tripura	Khowai	C
28.	Manipur	Ukhrul	D
29.	Manipur	Tamenglong	D
30.	Meghalaya	East Khasi Hills	D
31.	Meghalaya	West Khasi Hills	D
32.	Meghalaya	West Jaintia Hills	D
33.	Nagaland	Longleng	D
34.	Tripura	North Tripura	D
35.	Tripura	Dhalai	D

8. ATARI Jabalpur - Infrastructure

Sl. No	State	KVK District	Rank
1.	Chhattisgarh	Surajpur	A
2.	Chhattisgarh	Raigarh	A
3.	Madhya Pradesh	Jhabua	A
4.	Madhya Pradesh	Dhar	A
5.	Madhya Pradesh	Morena	A
6.	Madhya Pradesh	Satna	A
7.	Madhya Pradesh	Gwalior	A
8.	Chhattisgarh	Dantewada	B
9.	Chhattisgarh	Kanker (Uttar Bastar)	B
10.	Chhattisgarh	Bilaspur	B
11.	Chhattisgarh	Bastar	B
12.	Chhattisgarh	Korea (Baikunthpur)	B
13.	Chhattisgarh	Balodabazar - Bhatapara	B
14.	Chhattisgarh	Dhamtari	B
15.	Chhattisgarh	Mahasamund	B
16.	Chhattisgarh	Kabirdham	B

17.	Chhattisgarh	Janjgir-Champa	B
18.	Chhattisgarh	Balrampur	B
19.	Madhya Pradesh	Betul	B
20.	Madhya Pradesh	Narsinghpur	B
21.	Madhya Pradesh	Ujjain	B
22.	Madhya Pradesh	Balaghat	B
23.	Madhya Pradesh	Indore	B
24.	Madhya Pradesh	Shivpuri	B
25.	Madhya Pradesh	Shahdol	B
26.	Madhya Pradesh	Umaria	B
27.	Madhya Pradesh	Raisen	B
28.	Madhya Pradesh	Mandsaur	B
29.	Madhya Pradesh	Burhanpur	B
30.	Madhya Pradesh	Ratlam	B
31.	Madhya Pradesh	Datia	B
32.	Madhya Pradesh	Khandwa	B
33.	Madhya Pradesh	Sidhi	B
34.	Madhya Pradesh	Shajapur	B
35.	Madhya Pradesh	Sehore	B
36.	Madhya Pradesh	Chhatarpur	B
37.	Madhya Pradesh	Tikamgarh	B
38.	Madhya Pradesh	Jabalpur	B
39.	Madhya Pradesh	Chhindwara	B
40.	Madhya Pradesh	Neemuch	B
41.	Madhya Pradesh	Sagar	B
42.	Madhya Pradesh	Dindori	B
43.	Madhya Pradesh	Dewas	B
44.	Madhya Pradesh	Seoni	B
45.	Madhya Pradesh	Mandla	B
46.	Chhattisgarh	Jashpur	C
47.	Chhattisgarh	Narayanpur	C
48.	Chhattisgarh	Durg	C
49.	Chhattisgarh	Gariaband	C
50.	Chhattisgarh	Bijapur	C
51.	Chhattisgarh	Korba	C
52.	Madhya Pradesh	Guna	C
53.	Madhya Pradesh	Damoh	C
54.	Madhya Pradesh	Bhopal	C
55.	Madhya Pradesh	Hoshangabad	C
56.	Madhya Pradesh	Ashoknagar	C
57.	Madhya Pradesh	Rewa	C
58.	Madhya Pradesh	Harda	C
59.	Madhya Pradesh	Sheopur	C
60.	Madhya Pradesh	Barwani	C
61.	Madhya Pradesh	Katni	C
62.	Madhya Pradesh	Khargone	C
63.	Madhya Pradesh	Rajgarh	C
64.	Madhya Pradesh	Bhind	C
65.	Chhattisgarh	Rajnandgaon	D
66.	Madhya Pradesh	Panna	D

9. ATARI Pune - Infrastructure

Sl. No	State	KVK District	Rank
1.	Gujarat	Kheda	A
2.	Gujarat	Porbandar	A
3.	Gujarat	Amreli	A
4.	Gujarat	Dang	A
5.	Gujarat	Gandhinagar	A
6.	Gujarat	Vadodara	A
7.	Gujarat	Surendranagar	A
8.	Gujarat	Navasari	A

9.	Gujarat	Valsad	A
10.	Gujarat	Gir Somnath	A
11.	Maharashtra	Amravati	A
12.	Maharashtra	Ahmednagar I	A
13.	Maharashtra	Washim	A
14.	Maharashtra	Latur	A
15.	Maharashtra	Pune	A
16.	Maharashtra	Pune	A
17.	Maharashtra	Jalna	A
18.	Maharashtra	Buldhana	A
19.	Maharashtra	Aurangabad I	A
20.	Maharashtra	Gondia	A
21.	Maharashtra	Yavatmal	A
22.	Goa	North Goa	B
23.	Gujarat	Bharuch	B
24.	Gujarat	Narmada	B
25.	Gujarat	Kutch	B
26.	Gujarat	Patan	B
27.	Gujarat	Banaskantha 1	B
28.	Gujarat	Jamnagar	B
29.	Gujarat	Sabarkantha	B
30.	Gujarat	Mehsana	B
31.	Gujarat	Tapi	B
32.	Gujarat	Rajkot	B
33.	Gujarat	Anand	B
34.	Gujarat	Panchmahal	B
35.	Gujarat	Dahod	B
36.	Maharashtra	Palghar (Thane)	B
37.	Maharashtra	Beed I	B
38.	Maharashtra	Kolhapur	B
39.	Maharashtra	Amravati	B
40.	Maharashtra	Solapur I	B
41.	Maharashtra	Jalgaon I (Old)	B
42.	Maharashtra	Nashik	B
43.	Maharashtra	Nagpur	B
44.	Maharashtra	Parbhani	B
45.	Maharashtra	Satara I	B
46.	Maharashtra	Wardha	B
47.	Maharashtra	Raigad	B
48.	Maharashtra	Nanded I	B
49.	Maharashtra	Solapur II	B
50.	Maharashtra	Hingoli	B
51.	Maharashtra	Nashik	B
52.	Maharashtra	Nandurbar	B
53.	Maharashtra	Gadchiroli	B
54.	Maharashtra	Sangli	B
55.	Maharashtra	Beed	B
56.	Maharashtra	Nanded II	B
57.	Goa	South Goa	C
58.	Gujarat	Bhavnagar	C
59.	Gujarat	Ahmedabad	C
60.	Gujarat	Surat	C
61.	Gujarat	Kutch (Bhuj)	C
62.	Gujarat	Rajkot	C
63.	Maharashtra	Osmanabad	C
64.	Maharashtra	Chandrapur	C
65.	Maharashtra	Bhandara	C
66.	Maharashtra	Dhule	C
67.	Maharashtra	Jalgaon	C
68.	Maharashtra	Sindhudurg	C
69.	Maharashtra	Buldhana	C
70.	Maharashtra	Ratnagiri	C
71.	Maharashtra	Akola	C

72.	Maharashtra	Aurangabad II	C
73.	Maharashtra	Satara II	C
74.	Maharashtra	Ahmednagar II	C

10. ATARI Hyderabad- Infrastructure

Sl. No.	State	KVK District	Rank
1.	Andhra Pradesh	Krishna	A
2.	Andhra Pradesh	Chittoor I	A
3.	Andhra Pradesh	Srikakulam	A
4.	Andhra Pradesh	West Godavari	A
5.	Andhra Pradesh	Anantapur	A
6.	Andhra Pradesh	Visakhapatnam	A
7.	Tamil Nadu	Erode	A
8.	Tamil Nadu	Dharmapuri	A
9.	Tamil Nadu	Perambalur	A
10.	Tamil Nadu	Karur	A
11.	Tamil Nadu	Namakkal	A
12.	Tamil Nadu	Thoothukudi	A
13.	Telangana	Karimnagar	A
14.	Telangana	Khammam	A
15.	Telangana	Suryapet	A
16.	Telangana	Nalgonda	A
17.	Andhra Pradesh	Kurnool	B
18.	Andhra Pradesh	East Godavari	B
19.	Andhra Pradesh	East Godavari	B
20.	Andhra Pradesh	YSR District (Kadapa)	B
21.	Andhra Pradesh	West Godavari	B
22.	Puducherry	Puducherry	B
23.	Tamil Nadu	Dindigul	B
24.	Tamil Nadu	Tiruvallur	B
25.	Tamil Nadu	Coimbatore	B
26.	Tamil Nadu	Vellore	B
27.	Tamil Nadu	Triruvannamalai	B
28.	Tamil Nadu	Cuddalore	B
29.	Tamil Nadu	Ariyalur	B
30.	Tamil Nadu	Salem	B
31.	Tamil Nadu	Madurai	B
32.	Tamil Nadu	Nagapattinam	B
33.	Tamil Nadu	Sivagangai	B
34.	Tamil Nadu	Pudukkottai	B
35.	Tamil Nadu	Thiruvarur	B
36.	Tamil Nadu	Virudhunagar	B
37.	Tamil Nadu	Tirunelveli	B
38.	Tamil Nadu	Kancheepuram	B
39.	Telangana	Ranga Reddy	B
40.	Telangana	Nagarkurnool	B
41.	Telangana	Nizamabad	B
42.	Telangana	Mahabubnagar	B
43.	Telangana	Mahabubabad	B
44.	Andhra Pradesh	Vizianagaram	C
45.	Andhra Pradesh	Krishna	C
46.	Andhra Pradesh	Nellore	C
47.	Andhra Pradesh	Guntur	C
48.	Andhra Pradesh	Anantapur	C
49.	Andhra Pradesh	Prakasam I	C
50.	Andhra Pradesh	Kurnool	C
51.	Andhra Pradesh	Prakasam II	C
52.	Puducherry	Karaikal	C
53.	Tamil Nadu	Villupuram	C
54.	Tamil Nadu	Theni	C
55.	Tamil Nadu	Tiruchirappalli	C
56.	Tamil Nadu	Kanyakumari	C

57.	Tamil Nadu	Thanjavur	C
58.	Tamil Nadu	Ramanathapuram	C
59.	Tamil Nadu	Krishnagiri	C
60.	Telangana	Sangareddy	C
61.	Telangana	Warangal	C
62.	Telangana	Peddapalli	C
63.	Telangana	Adilabad	C
64.	Andhra Pradesh	Chittoor II	D

11. ATARI Bangaluru - Infrastructure

Sl. No	State	KVK District	Rank
1.	Karnataka	Kodagu	A
2.	Karnataka	Mysore	A
3.	Karnataka	Gadag	A
4.	Karnataka	Tumakuru I	A
5.	Karnataka	Udupi	A
6.	Karnataka	Tumakuru - II	A
7.	Karnataka	Chikkamagaluru	A
8.	Karnataka	Vijayapura	A
9.	Karnataka	Dharwad	A
10.	Karnataka	Kalaburagi-I	A
11.	Karnataka	Bidar	A
12.	Karnataka	Belgaum	A
13.	Karnataka	Bagalkot	A
14.	Kerala	Pathanamthitta	A
15.	Kerala	Malappuram	A
16.	Kerala	Kannur	A
17.	Kerala	Thiruvananthapuram	A
18.	Karnataka	Hassan	B
19.	Karnataka	Raichur	B
20.	Karnataka	Davanagere	B
21.	Karnataka	Chamarajanagar	B
22.	Karnataka	Ramanagara	B
23.	Karnataka	Dakshina Kannada	B
24.	Karnataka	Chitradurga	B
25.	Karnataka	Koppal	B
26.	Karnataka	Haveri	B
27.	Karnataka	Ballari	B
28.	Karnataka	Kalaburagi II	B
29.	Karnataka	Mandya	B
30.	Karnataka	Belagavi	B
31.	Karnataka	Bengaluru Rural	B
32.	Kerala	Kozhikode	B
33.	Kerala	Wayanad	B
34.	Kerala	Ernakulam	B
35.	Kerala	Kollam	B
36.	Kerala	Kottayam	B
37.	Kerala	Alappuzha	B
38.	Kerala	Thrissur	B
39.	Kerala	Palakkad	B
40.	Karnataka	Uttara Kannada	C
41.	Karnataka	Shivamogga	C
42.	Karnataka	Kolar	C
43.	Kerala	Idukki	C
44.	Kerala	Kasaragod	C

ANNEXURE –D-1

Comparative Status of Infrastructure Ranking: All India Vs ATARI by Type of Management

Comparison Among		A Category						
		ICAR	Government	SAU	NGO	Other Educational Institutions	PSU	Total (%)
Zone – I	Ludhiana	0	0	100	0	0	0	100
Zone – II	Jodhpur	29	0	43	29	0	0	100
Zone – III	Kanpur	11	0	78	11	0	0	100
Zone – IV	Patna	0	0	63	38	0	0	100
Zone – V	Kolkata	0	0	63	25	0	13	100
Zone – VI	Guwahati	0	0	100	0	0	0	100
Zone – VIII	Pune	0	0	38	48	14	0	100
Zone – IX	Jabalpur	0	0	86	14	0	0	100
Zone – X	Hyderabad	0	0	50	50	0	0	100
Zone – XI	Bengaluru	12	0	59	29	0	0	100
	All India	**4**	**0**	**64**	**28**	**3**	**1**	**100**

Note: All percentages are rounded-off. All figures are %ages.

Comparison Among		B Category						
		ICAR	Government	SAU	NGO	Other Educational Institutions	PSU	Total (%)
Zone – I	Ludhiana	10	0	90	0	0	0	100
Zone – II	Jodhpur	4	0	82	7	7	0	100
Zone – III	Kanpur	4	0	50	33	13	0	100
Zone – IV	Patna	6	0	75	16	0	3	100
Zone – V	Kolkata	7	0	86	7	0	0	100
Zone – VI	Guwahati	11	33	56	0	0	0	100
Zone – VII	Barapani	27	55	9	9	0	0	100
Zone – VIII	Pune	9	0	40	51	0	0	100
Zone – IX	Jabalpur	0	0	87	13	0	0	100
Zone – X	Hyderabad	7	4	63	19	7	0	100
Zone – XI	Bengaluru	14	0	77	9	0	0	100
	All India	**10**	**0**	**90**	**0**	**0**	**0**	**100**

Note: All percentages are rounded-off. All figures in %ages.

Comparison Among		C Category						
		ICAR	Government	SAU	NGO	Other Educational Institutions	PSU	Total (%)
Zone – I	Ludhiana	0	0	92	0	0	8	100
Zone – II	Jodhpur	6	0	88	6	0	0	100
Zone – III	Kanpur	8	0	83	4	4	0	100
Zone – IV	Patna	0	0	88	13	0	0	100
Zone – V	Kolkata	16	0	84	0	0	0	100
Zone – VI	Guwahati	11	17	72	0	0	0	100
Zone – VII	Barapani	38	38	6	13	6	0	100
Zone – VIII	Pune	6	6	61	28	0	0	100
Zone – IX	Jabalpur	5	0	95	0	0	0	100
Zone – X	Hyderabad	10	5	65	20	0	0	100
Zone – XI	Bengaluru	20	0	60	20	0	0	100
	All India	**11**	**6**	**74**	**8**	**1**	**1**	**100**

Note: All percentages are rounded-off. All figures in %ages.

Comparison Among		D Category						
		ICAR	Government	SAU	NGO	Other Educational Institutions	PSU	Total (%)
Zone – I	Ludhiana	0	0	100	0	0	0	100
Zone – II	Jodhpur	11	0	78	11	0	0	100
Zone – III	Kanpur	9	0	91	0	0	0	100
Zone – IV	Patna	0	0	100	0	0	0	100
Zone – V	Kolkata	17	0	83	0	0	0	100
Zone – VI	Guwahati	18	64	18	0	0	0	100
Zone – VII	Barapani	38	63	0	0	0	0	100
Zone – IX	Jabalpur	0	0	100	0	0	0	100
Zone – X	Hyderabad	0	0	100	0	0	0	100
	All India	**14**	**20**	**64**	**2**	**0**	**0**	**100**

Note: All percentages are rounded-off. All figures in %ages.

ANNEXURE –D-2

State - wise Ranking of KVKs by Infrastructure and by Period of Establishment

(Note: All percentages are rounded-off. All figures are in %ages).

A Category

State	1974 - 1979	1980 - 1984	1985 - 1989	1990 - 1994	1995 - 1999	2000 - 2004	2005 - 2009	2010 - 2012	Total (%)
Himachal Pradesh	0	0	0	67	0	33	0	0	100
Jammu & Kashmir	0	0	0	100	0	0	0	0	100
Punjab	0	8	0	38	15	15	23	0	100
Uttarakhand	0	0	0	0	0	100	0	0	100
Haryana	33	33	0	33	0	0	0	0	100
Rajasthan	0	50	0	50	0	0	0	0	100
Uttar Pradesh	0	11	11	33	11	11	22	0	100
Bihar	17	0	0	0	0	50	33	0	100
Jharkhand	0	0	50	0	0	0	50	0	100
West Bengal	13	13	0	13	0	38	25	0	100
Assam	0	0	0	0	100	0	0	0	100
Gujarat	10	10	0	10	10	10	50	0	100
Maharashtra	0	9	0	45	9	18	9	9	100
Chhattisgarh	0	0	0	0	50	50	0	0	100
Madhya Pradesh	0	20	0	20	20	40	0	0	100
Andhra Pradesh	0	17	17	17	17	17	0	17	100
Tamil Nadu	0	0	0	17	17	33	33	0	100
Telangana	0	25	0	25	0	25	0	25	100
Karnataka	8	0	23	15	8	31	15	0	100
Kerala	25	0	0	0	25	50	0	0	100
All India	**5**	**10**	**5**	**23**	**10**	**27**	**17**	**3**	**100**

B Category

State	1974 - 1979	1980 - 1984	1985 - 1989	1990 - 1994	1995 - 1999	2000 - 2004	2005 - 2009	2010 - 2012	Total (%)
Himachal Pradesh	0	17	0	33	33	17	0	0	100
Jammu & Kashmir	0	17	0	0	0	33	50	0	100
Punjab	0	0	0	0	25	0	50	25	100
Uttarakhand	0	0	0	20	0	60	20	0	100
Haryana	0	10	0	50	10	30	0	0	100
Rajasthan	6	6	11	44	17	6	0	11	100
Uttar Pradesh	4	4	8	33	13	21	17	0	100
Bihar	0	5	0	27	5	18	45	0	100
Jharkhand	10	0	0	0	0	60	30	0	100
Andaman & Nicobar Islands	0	0	0	100	0	0	0	0	100

Odisha	0	33	0	50	17	0	0	0	100
West Bengal	14	0	0	14	0	29	43	0	100
Assam	0	0	20	0	0	60	20	0	100
Arunachal Pradesh	0	0	0	0	0	0	100	0	100
Sikkim	0	33	0	0	0	0	67	0	100
Manipur	50	0	0	0	0	50	0	0	100
Meghalaya	0	0	0	0	0	100	0	0	100
Mizoram	0	0	0	14	14	0	71	0	100
Nagaland	0	0	0	0	0	0	100	0	100
Goa	0	100	0	0	0	0	0	0	100
Gujarat	8	8	8	23	0	23	31	0	100
Maharashtra	10	5	0	33	10	24	0	19	100
Chhattisgarh	0	9	0	0	0	45	36	9	100
Madhya Pradesh	4	4	0	15	15	33	30	0	100
Andhra Pradesh	0	20	20	0	20	0	20	20	100
Puducherry	100	0	0	0	0	0	0	0	100
Tamil Nadu	6	0	19	19	6	38	13	0	100
Telangana	20	0	20	20	0	20	0	20	100
Karnataka	7	0	0	14	7	43	7	21	100
Kerala	25	13	0	25	0	38	0	0	100
All India	**6**	**6**	**4**	**22**	**8**	**28**	**21**	**5**	**100**

C Category

State	1974 - 1979	1980 - 1984	1985 - 1989	1990 - 1994	1995 - 1999	2000 - 2004	2005 - 2009	2010 - 2012	Total (%)
Himachal Pradesh	0	0	33	0	0	33	33	0	100
Jammu & Kashmir	0	0	0	20	0	40	40	0	100
Punjab	0	0	0	0	0	0	0	100	100
Uttarakhand	0	0	0	0	0	100	0	0	100
Delhi	0	0	0	0	100	0	0	0	100
Haryana	0	0	20	20	0	60	0	0	100
Rajasthan	0	0	9	55	0	9	0	27	100
Uttar Pradesh	0	13	13	0	4	13	50	8	100
Bihar	10	10	0	10	10	30	20	10	100
Jharkhand	0	0	33	0	0	50	17	0	100
Andaman & Nicobar Islands	0	0	0	0	0	0	0	100	100
Odisha	5	5	5	5	0	32	45	5	100
West Bengal	0	0	0	50	0	0	50	0	100
Assam	0	8	0	0	8	54	31	0	100
Arunachal Pradesh	25	0	0	0	0	0	75	0	100
Sikkim	0	0	0	0	0	0	100	0	100
Manipur	0	0	0	0	0	20	60	20	100
Meghalaya	100	0	0	0	0	0	0	0	100
Mizoram	0	0	0	0	0	0	100	0	100
Nagaland	0	14	0	0	0	14	71	0	100
Tripura	50	50	0	0	0	0	0	0	100
Goa	0	0	0	0	0	0	100	0	100
Gujarat	0	0	0	0	0	20	0	80	100
Maharashtra	0	17	0	0	8	25	0	50	100
Chhattisgarh	0	0	0	17	0	0	33	50	100
Madhya Pradesh	8	0	0	15	0	38	38	0	100
Andhra Pradesh	0	13	0	0	0	25	0	63	100
Puducherry	0	0	0	0	100	0	0	0	100
Tamil Nadu	14	0	0	14	29	43	0	0	100
Telangana	0	0	0	25	0	25	0	50	100
Karnataka	0	0	0	0	0	67	0	33	100
Kerala	0	0	0	50	50	0	0	0	100
All India	**4**	**6**	**5**	**9**	**5**	**27**	**28**	**16**	**100**

D Category

State	1974 - 1979	1980 - 1984	1985 - 1989	1990 - 1994	1995 - 1999	2000 - 2004	2005 - 2009	2010 - 2012	Total (%)
Jammu & Kashmir	0	0	0	0	0	0	25	75	100
Punjab	0	0	0	0	0	0	0	100	100
Uttarakhand	0	100	0	0	0	0	0	0	100
Rajasthan	0	0	0	11	0	0	0	89	100
Uttar Pradesh	0	9	0	0	0	45	36	9	100
Jharkhand	0	0	0	0	0	0	75	25	100
Andaman & Nicobar Islands	0	0	0	0	0	0	0	100	100
Odisha	20	0	0	0	0	0	40	40	100
Assam	0	0	0	0	0	0	33	67	100
Arunachal Pradesh	0	0	0	0	0	0	88	13	100
Manipur	0	0	0	0	0	0	100	0	100
Meghalaya	0	0	0	0	0	0	33	67	100
Nagaland	0	0	0	0	0	0	0	100	100
Tripura	0	0	0	0	0	0	100	0	100
Chhattisgarh	0	0	0	0	0	0	100	0	100
Madhya Pradesh	0	0	0	0	0	100	0	0	100
Andhra Pradesh	0	0	0	0	0	0	0	100	100
All India	**2**	**3**	**0**	**2**	**0**	**10**	**41**	**42**	**100**

Annexure – D-3

Distribution of KVKs by ATARI/ States according to Mandated Activities and by Type of Management (%)

All India/ATARI		Name of the State	ICAR	Government	SAU	NGO	Other Educational Institutions	PSU	Total
Zone – I	Ludhiana	Himachal Pradesh	0	0	100	0	0	0	**100**
		Jammu & Kashmir	0	0	100	0	0	0	**100**
		Punjab	0	0	100	0	0	0	**100**
		Uttarakhand	15	0	85	0	0	0	**100**
Zone – II	Jodhpur	Delhi	0	0	0	0	0	100	**100**
		Haryana	11	0	78	11	0	0	**100**
		Rajasthan	7	0	79	10	5	0	**100**
Zone – III	Kanpur	Uttar Pradesh	7	0	72	15	6	0	**100**
Zone – IV	Patna	Bihar	3	0	82	13	0	3	**100**
		Jharkhand	5	0	73	23	0	0	**100**
Zone – V	Kolkata	Andaman & Nicobar Islands	100	0	0	0	0	0	**100**
		Odisha	6	0	94	0	0	0	**100**
		West Bengal	6	0	71	18	0	6	**100**
Zone – VI	Guwahati	Assam	9	0	91	0	0	0	**100**
		Arunachal Pradesh	15	77	8	0	0	0	**100**
		Sikkim	25	75	0	0	0	0	**100**
Zone – VII	Barapani	Manipur	56	11	11	22	0	0	**100**
		Meghalaya	40	60	0	0	0	0	**100**
		Mizoram	0	88	13	0	0	0	**100**
		Nagaland	44	44	0	0	11	0	**100**
		Tripura	25	50	0	25	0	0	**100**
Zone – VIII	Pune	Goa	50	50	0	0	0	0	**100**
		Gujarat	7	0	57	25	11	0	**100**
		Maharashtra	2	0	39	59	0	0	**100**
Zone – IX	Jabalpur	Chhattisgarh	0	0	100	0	0	0	**100**
		Madhya Pradesh	2	0	85	13	0	0	**100**
Zone – X	Hyderabad	Andhra Pradesh	15	0	70	15	0	0	**100**
		Puducherry	0	100	0	0	0	0	**100**
		Tamil Nadu	0	0	59	34	7	0	**100**
		Telangana	8	0	62	31	0	0	**100**
Zone – XI	Bengaluru	Karnataka	7	0	77	17	0	0	**100**

		Kerala	29	0	50	21	0	0	**100**
		Total	**8**	**5**	**69**	**15**	**2**	**0**	**100**

Note: All percentages are rounded-off.

Annexure-D-4: State - wise Ranking of KVKs by Impact of Mandated Activities

All India/ATARI		Name of the State	Ranks				
			A	B	C	D	Total (%)
Zone – I	Ludhiana	Himachal Pradesh	42	58	0	0	100
		Jammu & Kashmir	25	63	13	0	100
		Punjab	60	35	5	0	100
		Uttarakhand	54	46	0	0	100
Zone – II	Jodhpur	Delhi	0	100	0	0	100
		Haryana	33	61	0	6	100
		Rajasthan	7	38	50	5	100
Zone – III	Kanpur	Uttar Pradesh	46	47	6	1	100
Zone – IV	Patna	Bihar	50	47	3	0	100
		Jharkhand	45	50	5	0	100
Zone – V	Kolkata	Andaman & Nicobar Islands	33	33	33	0	100
		Odisha	64	33	3	0	100
		West Bengal	71	29	0	0	100
Zone – VI	Guwahati	Assam	36	59	5	0	100
		Arunachal Pradesh	38	54	8	0	100
		Sikkim	25	75	0	0	100
Zone – VII	Barapani	Manipur	78	22	0	0	100
		Meghalaya	80	20	0	0	100
		Mizoram	63	38	0	0	100
		Nagaland	44	56	0	0	100
		Tripura	75	25	0	0	100
Zone – VIII	Pune	Goa	0	50	50	0	100
		Gujarat	29	68	4	0	100
		Maharashtra	55	39	5	2	100
Zone – IX	Jabalpur	Chhattisgarh	60	40	0	0	100
		Madhya Pradesh	78	22	0	0	100
Zone – X	Hyderabad	Andhra Pradesh	40	45	15	0	100
		Puducherry	0	50	50	0	100
		Tamil Nadu	41	55	3	0	100
		Telangana	54	31	15	0	100
Zone – XI	Bengaluru	Karnataka	43	57	0	0	100
		Kerala	43	57	0	0	100
		Total	**47**	**45**	**7**	**1**	**100**

Note: All percentages are rounded-off. All figures are %ages.

Annesure –D-5: Inter-state Comparison of Ranks of Allied Activities by ATARI

All India/ATARI		Name of the State	Ranks				Total %
			A	B	C	D	
Zone – I	Ludhiana	Himachal Pradesh	25	58	8	8	100
		Jammu & Kashmir	6	56	25	13	100
		Punjab	15	85	0	0	100
		Uttarakhand	38	38	23	0	100
Zone - II	Jodhpur	Delhi	0	100	0	0	100
		Haryana	11	61	22	6	100
		Rajasthan	12	29	48	12	100
Zone - III	Kanpur	Uttar Pradesh	26	51	21	1	100
Zone - IV	Patna	Bihar	42	34	18	5	100
		Jharkhand	27	50	18	5	100
Zone - V	Kolkata	Andaman & Nicobar Islands	0	67	33	0	100
		Odisha	27	58	12	3	100
		West Bengal	65	24	12	0	100

Zone - VI	Guwahati	Assam	9	59	18	14	100
		Arunachal Pradesh	8	38	54	0	100
		Sikkim	0	25	75	0	100
Zone - VII	Barapani	Manipur	11	89	0	0	100
		Meghalaya	20	80	0	0	100
		Mizoram	13	63	25	0	100
		Nagaland	0	44	44	11	100
		Tripura	50	25	25	0	100
Zone - VIII	Pune	Goa	0	50	0	50	100
		Gujarat	18	50	29	4	100
		Maharashtra	32	57	9	2	100
Zone – IX	Jabalpur	Chhattisgarh	10	75	15	0	100
		Madhya Pradesh	35	61	4	0	100
Zone – X	Hyderabad	Andhra Pradesh	20	45	25	10	100
		Puducherry	50	0	50	0	100
		Tamil Nadu	52	34	10	3	100
		Telangana	38	38	23	0	100
Zone - XI	Bengaluru	Karnataka	40	53	7	0	100
		Kerala	21	65	14	0	100
		All India	**26**	**51**	**19**	**4**	**100**

Note: All percentages are rounded-off. All figures are %ages.

Annexure-D-6: Inter-state Variations of KVKs within each ATARI of their Overall Ranking

All India/ATARI		Name of the State	Ranks				Total (%)
			A	B	C	D	
Zone – I	Ludhiana	Himachal Pradesh	42	58	0	0	100
		Jammu & Kashmir	31	56	13	0	100
		Punjab	75	15	10	0	100
		Uttarakhand	46	46	8	0	100
Zone – II	Jodhpur	Delhi	0	100	0	0	100
		Haryana	39	56	0	6	100
		Rajasthan	10	38	43	10	100
Zone – III	Kanpur	Uttar Pradesh	40	50	9	1	100
Zone – IV	Patna	Bihar	47	50	3	0	100
		Jharkhand	32	64	5	0	100
Zone – V	Kolkata	Andaman & Nicobar Islands	33	0	67	0	100
		Odisha	52	39	9	0	100
		West Bengal	82	18	0	0	100
Zone – VI	Guwahati	Assam	14	82	5	0	100
		Arunachal Pradesh	8	77	15	0	100
		Sikkim	25	75	0	0	100
Zone – VII	Barapani	Manipur	22	78	0	0	100
		Meghalaya	40	60	0	0	100
		Mizoram	63	38	0	0	100
		Nagaland	44	56	0	0	100
		Tripura	75	25	0	0	100
Zone – VIII	Pune	Goa	0	50	50	0	100
		Gujarat	29	68	4	0	100
		Maharashtra	50	45	2	2	100
Zone – IX	Jabalpur	Chhattisgarh	50	50	0	0	100
		Madhya Pradesh	67	33	0	0	100
Zone – X	Hyderabad	Andhra Pradesh	30	55	15	0	100
		Puducherry	0	50	50	0	100
		Tamil Nadu	45	48	7	0	100
		Telangana	54	31	15	0	100
Zone – XI	Bengaluru	Karnataka	53	47	0	0	100
		Kerala	43	57	0	0	100
		All India	**43**	**48**	**8**	**1**	**100**

Note: All percentages are rounded-off. All figures are %ages.

Annexure-E-1: State-wise Number of OFTs Carried - out by the KVKs during the last five years

State		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Andaman & Nicobar Islands	17	17	19	21	23	97
2.	Andhra Pradesh	239	300	250	288	355	1432
3.	Arunachal Pradesh	311	302	251	318	427	1609
4.	Assam	398	419	449	623	628	2517
5.	Bihar	253	312	323	314	368	1570
6.	Chhattisgarh	209	273	308	327	312	1429
7.	Delhi	14	14	10	8	9	55
8.	Goa	40	32	24	15	26	137
9.	Gujarat	260	516	687	603	577	2643
10.	Haryana	348	410	315	370	357	1800
11.	Himachal Pradesh	289	279	193	318	241	1320
12.	Jammu & Kashmir	124	119	160	146	141	690
13.	Jharkhand	286	307	260	264	263	1380
14.	Karnataka	330	253	296	258	250	1387
15.	Kerala	330	218	173	238	331	1290
16.	Madhya Pradesh	1359	1255	1644	1768	1656	7682
17.	Maharashtra	648	728	822	720	810	3728
18.	Manipur	304	248	224	154	223	1153
19.	Meghalaya	124	224	226	237	235	1046
20.	Mizoram	225	231	226	276	294	1252
21.	Nagaland	353	293	317	269	240	1472
22.	Odisha	684	786	760	805	942	3977
23.	Puducherry	10	6	6	4	4	30
24.	Punjab	193	226	313	317	289	1338
25.	Rajasthan	207	245	276	244	273	1245
26.	Sikkim	111	145	131	137	87	611
27.	Tamil Nadu	543	267	244	198	240	1492
28.	Telangana	148	162	157	135	145	747
29.	Tripura	139	268	239	237	206	1089
30.	Uttar Pradesh	1106	1089	1322	1421	1409	6347
31.	Uttarakhand	97	90	164	164	152	667
32.	West Bengal	201	237	227	255	262	1182
	National Level	**9900**	**10271**	**11016**	**11452**	**11775**	**54414**

Annexure-E-2: State - wise Number of FLDs Carried - out by the KVKs during the last five years

State		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Andaman & Nicobar Islands	25	41	20	22	23	131
2.	Andhra Pradesh	275	449	515	687	865	2791
3.	Arunachal Pradesh	260	608	625	805	784	3082
4.	Assam	367	454	412	748	1084	3065
5.	Bihar	4136	3055	2597	3958	5284	19030
6.	Chhattisgarh	320	397	478	671	690	2556
7.	Delhi	132	115	233	176	157	813
8.	Goa	151	123	106	88	41	509
9.	Gujarat	3000	3331	3807	3743	5351	19232
10.	Haryana	2139	3257	2674	3723	4056	15849
11.	Himachal Pradesh	3159	2665	2316	2878	3577	14595
12.	Jammu & Kashmir	3016	2736	3632	3492	6763	19639
13.	Jharkhand	2142	2707	1278	1941	2767	10835
14.	Karnataka	1062	862	797	1144	1282	5147
15.	Kerala	436	464	413	397	409	2119
16.	Madhya Pradesh	2120	2368	2364	2672	3660	13184
17.	Maharashtra	884	1327	1232	1284	1571	6298
18.	Manipur	186	197	170	185	187	925
19.	Meghalaya	60	98	89	127	143	517
20.	Mizoram	81	131	217	241	288	958
21.	Nagaland	180	240	248	250	221	1139

22.	Odisha	612	677	536	624	715	3164
23.	Puducherry	22	24	19	19	20	104
24.	Punjab	2406	3874	4873	7267	7236	25656
25.	Rajasthan	8151	10454	11571	10955	12934	54065
26.	Sikkim	317	243	207	207	188	1162
27.	Tamil Nadu	1007	936	986	714	727	4370
28.	Telangana	205	222	285	279	279	1270
29.	Tripura	81	128	149	164	227	749
30.	Uttar Pradesh	6457	5737	6553	7984	8655	35386
31.	Uttarakhand	4393	4329	4048	4121	4097	20988
32.	West Bengal	1355	2009	1881	3395	4202	12842
	National Level	**49137**	**54258**	**55331**	**64961**	**78483**	**302170**

Annexure - E - 3: State-wise Number of Farmers Training Programmes Organised during the last five years

State		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Andaman & Nicobar Islands	75	80	65	94	89	403
2.	Andhra Pradesh	830	1048	1114	902	1046	4940
3.	Arunachal Pradesh	663	633	557	633	852	3338
4.	Assam	1079	1004	883	1000	976	4942
5.	Bihar	3699	4254	4270	4028	4307	20558
6.	Chhattisgarh	1139	1248	1431	1323	1242	6383
7.	Delhi	58	68	53	54	55	288
8.	Goa	104	119	97	101	54	475
9.	Gujarat	2357	2398	2288	2069	1694	10806
10.	Haryana	1813	1813	1776	1874	1843	9119
11.	Himachal Pradesh	751	677	749	694	745	3616
12.	Jammu & Kashmir	813	835	825	756	931	4160
13.	Jharkhand	1649	1810	1687	1661	1800	8607
14.	Karnataka	2406	1830	1555	1517	1861	9169
15.	Kerala	1508	1469	1361	1175	1110	6623
16.	Madhya Pradesh	3224	3337	3540	3186	3286	16573
17.	Maharashtra	2739	3078	3192	3087	3142	15238
18.	Manipur	434	446	429	458	399	2166
19.	Meghalaya	323	327	441	421	480	1992
20.	Mizoram	294	474	369	489	552	2178
21.	Nagaland	488	656	524	511	520	2699
22.	Odisha	1739	1562	1449	1433	1045	7228
23.	Puducherry	157	126	74	60	69	486
24.	Punjab	1271	1384	1621	1378	1405	7059
25.	Rajasthan	3656	2725	3023	2791	2355	14550
26.	Sikkim	279	272	233	249	241	1274
27.	Tamil Nadu	4096	3285	2363	1903	2158	13805
28.	Telangana	587	629	620	594	710	3140
29.	Tripura	197	243	205	227	232	1104
30.	Uttar Pradesh	6165	6636	6826	7238	6199	33064
31.	Uttarakhand	904	875	920	814	854	4367
32.	West Bengal	1497	1527	1701	1926	2024	8675
	National Level	**46994**	**46868**	**46241**	**44646**	**44276**	**229025**

Annexure-E-4: State-wise Number of Farmers Attended the Training Programmes Organised by the KVKs during the last five years

State		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Andaman & Nicobar Islands	1829	2349	1842	2928	2595	11543
2.	Andhra Pradesh	32185	33256	35273	33438	38996	173148
3.	Arunachal Pradesh	14943	15033	13994	16326	25670	85966
4.	Assam	28476	27908	25879	27986	26978	137227
5.	Bihar	135905	128373	123832	112576	120268	620954
6.	Chhattisgarh	40617	42473	46548	42017	36339	207994

7.	Delhi	1299	1371	1098	1177	1136	6081
8.	Goa	2120	2695	2489	2436	1290	11030
9.	Gujarat	75096	75478	73489	68342	57393	349798
10.	Haryana	48204	50091	48183	50727	51009	248214
11.	Himachal Pradesh	27175	24169	25667	25437	23910	126358
12.	Jammu & Kashmir	18560	20322	20518	18738	24406	102544
13.	Jharkhand	48314	52565	53151	49923	58003	261956
14.	Karnataka	91936	60804	66201	63624	77096	359661
15.	Kerala	48420	51157	48411	43637	39623	231248
16.	Madhya Pradesh	83334	89649	101046	89486	91678	455193
17.	Maharashtra	87437	96259	101405	102341	100812	488254
18.	Manipur	10922	10019	9701	10463	9060	50165
19.	Meghalaya	7024	8248	10629	11645	12234	49780
20.	Mizoram	9580	14962	10768	16634	18420	70364
21.	Nagaland	15115	19084	14543	11674	14070	74486
22.	Odisha	43772	40920	36725	35188	25282	181887
23.	Puducherry	4432	3215	1754	1583	1889	12873
24.	Punjab	21132	22682	29623	27072	28529	129038
25.	Rajasthan	74511	77283	84348	73996	65877	376015
26.	Sikkim	6755	6358	6147	6491	8775	34526
27.	Tamil Nadu	137402	111860	76777	66380	67640	460059
28.	Telangana	18965	18370	15904	21517	22939	97695
29.	Tripura	4077	5890	4795	5406	5591	25759
30.	Uttar Pradesh	135133	143070	147329	129667	135151	690350
31.	Uttarakhand	21681	19923	20308	17948	20923	100783
32.	West Bengal	46238	47252	50525	62894	60842	267751
	National Level	**1342589**	**1323088**	**1308902**	**1249697**	**1274424**	**6498700**

Annexure-E-5: State-wise Number of Women Farmers Attended the Training Programmes Organised by the KVKs during the last five years

State		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Andaman & Nicobar Islands	681	958	958	1210	1086	4893
2.	Andhra Pradesh	8769	10426	10364	10160	13326	53045
3.	Arunachal Pradesh	8446	8142	7375	9273	12491	45727
4.	Assam	9535	8598	9467	10172	9172	46944
5.	Bihar	23133	25924	24529	22353	22677	118616
6.	Chhattisgarh	6094	17433	9397	8948	9255	51127
7.	Delhi	486	240	213	232	314	1485
8.	Goa	1028	1285	1084	1153	623	5173
9.	Gujarat	23330	21650	22696	20415	17873	105964
10.	Haryana	7809	9110	10919	10819	10512	49169
11.	Himachal Pradesh	13536	11114	11635	11390	11162	58837
12.	Jammu & Kashmir	4036	4425	5241	4172	5782	23656
13.	Jharkhand	15324	17231	16683	15948	18985	84171
14.	Karnataka	26970	14937	15637	16626	19119	93289
15.	Kerala	19624	21495	22000	20223	17857	101199
16.	Madhya Pradesh	14014	18788	21537	17167	21045	92551
17.	Maharashtra	19977	22641	24281	24808	24123	115830
18.	Manipur	4764	4049	4001	4378	3578	20770
19.	Meghalaya	4131	4852	5851	6312	6446	27592
20.	Mizoram	3234	5020	3726	6294	6015	24289
21.	Nagaland	7478	9947	7438	6225	7646	38734
22.	Odisha	12414	10541	10220	10333	7849	51357
23.	Puducherry	2188	1873	742	997	865	6665
24.	Punjab	5225	6495	8438	7840	7721	35719
25.	Rajasthan	16697	14824	26402	21761	14630	94314
26.	Sikkim	3360	2931	2899	3263	4410	16863
27.	Tamil Nadu	51410	38579	26730	26223	23230	166172
28.	Telangana	5962	5226	3377	6059	5936	26560
29.	Tripura	1159	1379	1518	1946	1568	7570

30.	Uttar Pradesh	24764	27574	26354	30160	25301	134153
31.	Uttarakhand	8322	8275	9731	9030	10007	45365
32.	West Bengal	12620	11348	11929	16562	16780	69239
National Level		**366520**	**367310**	**363372**	**362452**	**357384**	**1817038**

Annexure - E - 6: Number of Youths Attended the Training Programmes Organised by the KVKs during the last five years

State		2012-13	2013-14	2014-15	2015-16	2016-17	Total
1.	Andaman & Nicobar Islands	883	402	425	761	773	3244
2.	Andhra Pradesh	4437	7281	7587	7409	6886	33600
3.	Arunachal Pradesh	2092	1713	2151	2479	2754	11189
4.	Assam	8167	9289	7949	11053	9134	45592
5.	Bihar	21249	29765	23301	20363	29843	124521
6.	Chhattisgarh	6005	7954	8225	6100	7117	35401
7.	Delhi	0	0	0	0	0	0
8.	Goa	187	440	626	333	623	2209
9.	Gujarat	6126	12833	10023	8402	10403	47787
10.	Haryana	11376	11852	10742	12293	14463	60726
11.	Himachal Pradesh	9080	7004	7800	5000	7505	36389
12.	Jammu & Kashmir	3556	3930	3449	3614	2458	17007
13.	Jharkhand	8304	10557	10603	9879	26179	65522
14.	Karnataka	10870	11696	10623	10757	11122	55068
15.	Kerala	13019	14024	10838	7685	16797	62363
16.	Madhya Pradesh	11157	11158	11163	12218	21111	66807
17.	Maharashtra	21809	18635	21007	19858	19822	101131
18.	Manipur	3000	2990	2225	3049	2772	14036
19.	Meghalaya	849	1003	1527	2058	2011	7448
20.	Mizoram	1605	1569	1900	2699	3512	11285
21.	Nagaland	3424	2342	1660	2391	3773	13590
22.	Odisha	6060	5830	4778	4484	3003	24155
23.	Puducherry	975	572	420	108	71	2146
24.	Punjab	9330	11332	15603	12986	12088	61339
25.	Rajasthan	4735	4524	4837	4183	5719	23998
26.	Sikkim	3869	3364	3629	2585	3003	16450
27.	Tamil Nadu	19843	14749	8069	9404	8740	60805
28.	Telangana	4297	7033	4710	7593	5829	29462
29.	Tripura	831	1260	965	1219	1758	6033
30.	Uttar Pradesh	21730	24348	25414	21469	22087	115048
31.	Uttarakhand	1400	1383	1675	1452	1590	7500
32.	West Bengal	7161	9644	12216	13338	14193	56552
	National Level	**227426**	**250476**	**236140**	**227222**	**277139**	**1218403**

ANNEXURE - F

Brief Highlight of the KVKs visited for Impact Assessment and Verification

1. KVK Srinagar

Background of KVK, Srinagar: Krishi Vigyan Kendra Srinagar was established in July, 2002 at K. D. Research Station, Old Airport. The Kendra came into operation in the year 2003 and was envisaged to act as innovative institutional model for assessment, refinement and on-farm demonstration of agricultural technologies and training of trainers and farmers. The Kendra works under the aegis of Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir and it's realm of responsibility includes the whole District of Srinagar

Recent Activities to Enhance the Effectiveness of KVK: The KVK has become a role model for other KVKs in the region of Kashmir, and has groomed couple of KVKs of neighbouring districts of Srinagar. It is meticulously converting the barren land allocated to KVK campus into productive asset. Some of them are developing a pond with the stagnant waters, and duck rearing, developing demonstration units of vermin compost, horticultural green house, mushroom cultivation among other things.

Crops and Thrust Areas of Focus by KVK(few examples):

Apple:	Crop diversification with emphasis on crops like strawberry
Strawberry:	IDM, INM and promotion of use of organics, micro nutrients, and on-farm nutrient cycling
Vegetables:	Off-season vegetable cultivation and cultivation under protected conditions exotic vegetable cultivation
Poultry and Dairy:	Promotion and Scientific management of livestock and poultry farming
Home Science:	Child and women care and awareness on balanced nutrition in backward areas of the district
Capacity Building:	Training of rural women, fisherwomen

Following photographs in the order of left to right are-

1. High Density Apple Orchard;
2. Demonstration and Training Sessions to Horticulture farmers; and
3. Poultry farm under controlled temperature during winter season in Srinagar

2. KVK Samrala, Ludhiana

Scenario of the District/KVK: Doraha region in District Ludhiana is the hub of bee-keepers in the area. Large numbers of young rurals are interested in the bee keeping business. KVK receives huge rush of farmers and farm women for Bee-keeping training every year.

Major interventions: Good quality seed production including cereals, oil seeds, pulses and vegetables etc. and sale of seeds, bee keeping, paddy-straw management, agro-processing and animal husbandry**.** However, the officials opine that the machinery such as happy seeder with press wheel is expensive. So Happy seeders are provided to KVK, it can be provided to farmers for wheat sowing under custom hiring mode.

Recent activities: The KVK is practicing integrated farming system (IFS)**.** KVK is in the process of constructing a fish pond at Campus under IFS. KVK is putting all efforts to stop the menace of paddy straw burning. This KVK organizes trainings, camps, demonstrations to educate and motivate the farmers to efficiently manage paddy straw and that too without burning the residue.

Achievements: KVK is having a minimal processing unit at campus where value addition of the farmer produce is done. Every year KVK sells a huge amount of seed. During 2017-18, KVK sold about 1500 quintals of seed only during - Rabi. Selling of recommended varieties of seed to farmers helped the farming community to increase crop yield, managing disease, decrease in cost of spray (insecticides and fungicides) and better quality of produce.

Entrepreneur in Bee-keeping

Focus Group Discussion (FGD) with officials

3. KVK Almora

District Profile in brief: Almora has a gross irrigated area of nearly 10,000 ha, out of which, only 50% is the net irrigated area. Geographical area of the district is 3700 sq. km dominated by hilly terrain that is part of the Kumaon region. Major crops of the district are rice, wheat, barley, fingermillet. Among the cereals, horsegram, lentil, bhatt are major crops. It has a significant presence in cultivation of fruits, vegetables, spices, and flowers.

Background of KVK: KVK Almora was established in February, 2004 and was put under the administrative control of G.B. Pant University of Agriculture & Technology, Pantnagar (Uttarakhand). It is located in the village Matela (Kosi), which is 10 km away from Almora Hqs.

Major Interventions & Technological Backstopping by KVK:

i. Promotion of IPM through common minimum programme in vegetable crops by adopting soil solarization, value addition in FYM, seed treatment/root dip method by bio-agents and vermin compost production.

ii. Popularization of improved small agricultural implements through demonstrations and trainings among farm women to reduce drudgery activities.

iii. Promotion of HYV of cereals, pulses, oilseeds, millets, and vegetables etc.

iv. Promotion of fodder crops under agro-forestry system for enhancing milk productivity of cattle.

v. Introduction of hybrid rice and basmati rice pusa basmati in the district.

Some of the Recent Contributions of KVK Almora:

1. Training the small-land holding farmers to transform towards integrated farming. KVK is supporting the farmers in construction of fish ponds, poultry, vegetable cultivation.

2. Progressive Farmer groomed by KVK, Almora with cattle and poly house at the background.

3. Some of the technological support provided by KVK through OFT/FLD.

4. KVK Almora is integrating its expertise with other schemes line MGNREGA to develop physical and tangible assets to farming communities in villages.

4. KVK Nainital

Brief History: KVK Nainital was started during June 2004 in the campus of Horticulture Research Centre, Jeolikote with a land allocation of 20 acres. Prior to establishment of KVK, there was a Rice Research station Majhera which was handed over to G .B. Pant University of Agriculture and Technology, Pantnagar by UP govt. during May, 1973 to enable the first & foremost agriculture university of this country to develop new technologies and research packages for agriculture in hill conditions of Kumaon region in Uttaranchal. This research station is situated at about 1000 meters above mean sea level in valley region of Kumaon.

District Profile vis-a-vis Farming Scenario: It has four types of soil lands, i.e., (i) sandy loam, (ii) alluvial sandy loam, (iii) brown forest soil, (iv) ed black clay. Major crops are rice, wheat, maize, soybean, ragi, zinger, lentil, pea, tomato, guava, jackfruit, peach, pear, mango .

Major Interventions by KVK: FLDs on soybean, toria, arhar, gahat, tentil, rice, jhangora, wheat, berseem, oat and vegetables like cabbage, tomato, chilli, capsicum.

Recent Activities: Short-term and long term vocational training courses and allied vacation for the farmers, and extension workers. OFTs for identifying technologies in terms of location specific sustainable land use.

Major Impact/Contributions of KVK: Mobilising small-land holding farmers for community farming in the cluster of villages for better yields. This initiative is notable keeping in view the hilly terrain, and small farmers with very tiny land portions of land under farming.

Above pictures are (i) meeting with progressive farmers in a village, and (ii) technological back-stopping to the tea gardens in collaboration with Horticulture Dept. of Uttarkhand Govt.

5. KVK Bageshwar

Profile of Agriculture & Animal Husbandry in the District: Bageshwar falls in the Western Himalayan Region with the soil characteristics of deep, shallow, and rock-out crops & glacier. Major farming systems are agriculture, horticulture and animal husbandry. Majority areas of crops are rice, wheat, mandua, barley. Among the vegetables radish, tomato, brinjal, onion, cabbage, french beans are dominating the rural economy. Indigenous breed of cattle and sheep are major sources of subsistence income.

Background of KVK Bageshwar: Established in March 2007, at Sinduri-Baskhola (Kafligair), 30 km away from the district hqs. The KVK Bageshwar is getting inspiration and technological guidance from ICAR-VPKAS, located 42 km away in adjoining Almora district. The KVK Bageshwar campus fully equipped with the working, and demonstration units such as (i) High-tech polyhouse, (ii) LDPE Lined Poly Tank, (iii) threshing floor, (iv) cattle shed, (v) demonstration units of several types, (vi) farm machinery, machinery of post-harvest processing of yield, (vii) solar-powered machinery customized to farm fields located in remote/hilly areas.

Recent Contributions & Innovative Practices:

1. Through FLD, wheat yield was increased by more than one-third. Paddy (irrigated) & paddy (rainfed) yields were increased by 35% & 41% respectively. Mandula millet yield was increased by 35%. Under oilseeds category, yield of VL Soya 47 was achieved by more than 50%. Under pulses, VL Arhar yield was doubled. Cumulatively, nearly 2300 farmers have benefitted through these FLDs in the preceding two years.

2. OFDs were successfully carried out in (i) varietal evaluation of tomato VL Tamatar4 with Manish varieties, (ii) efficacy of chemical and bioagents in management of anthracnose disease in chilly, (iii) seed and bio-products production to the extent of 1826 kg seed, 10375 vegetable seedilings, 7200 kg vermin compost, 5256 litres of milk were produced at KVK farm.

Recent contributions of KVK to enhance productivity and entrepreneurship in the district:

1. 25 training programs with cumulative beneficiaries of 800 farmers, women-folks, and youth were conducted in the areas of veterinary sciences, home science, plant protection.
2. Identifying technologies, conducting OFTs to suit local conditions, and land use pattern.

Following are few photographs of contributions of KVK, Bageshwar captured during the field visits-

1. Display of vegetables & other produce developed by KVK, and adopted by the farmers
2. An interaction meeting with the SMS, progressive farmers, and women entrepreneurs
3. Display of ergonometric-tools designed by KVK, Bageshwar, that minimize the drudgery of farmers
4. FLD of Tomato variety in poly house of KVK, Bageshwar

6. KVK Delhi

Farming Scenario : Fishery is quite successful here as prawn is grown in brackish water. Sale / marketing of the products of farmers is good through mandis and fish markets. The KVK helps in sale through AMAZON. State government subsidy is not there for poly houses, green houses although Delhi has 30,000 hectares under farming. There is only one society for fertilizers which is there at Narela. Connection of tube-wells with rivers has been disconnected.

Major Areas : Major emphasis of KVK Delhi is Entrepreneurship training. The KVK imparts training in bee-keeping, dairy processing, pickles making, horticulture, terrace farming, kitchen gardening. Gardeners and Malis trained from here are employed in many army, navy and other public sector like CPWD, Rashtrapati Bhawan ETC. They have also been employed in private sectors. This KVK produces good quality seeds also.

Achievements : The SMSs disseminate information and interact through media like AIR, TV etc. The SMSs have prepared modules for National Institute of Open University regarding plant protection, bee-keeping, mushroom

cultivation, horticulture etc. They go to schools and give suggestions about nutrition to students during nutritional week. On the Education day, 20-25 batches of students come from different schools. Nursing students also come for training. From other states also farmers come for training here.

Through Mobile apps and messages through mobile information is forwarded to farmers regarding weather forecasting.

FGD with scientists and farmers

Women entrepreneur

7. KVK Karnal

Specific Issue: Because of the vicinity of the KVK to city, it is convenient for the trainees to attend the training programmes. So, this KVK gets very good response. There is no support staff/ administrative staff . Out of 6 sanctioned positions of SMSs , 3 are occupied.

Areas of work: The KVK facilitates farmers in disseminating information and technology through dairy production, dairy processing, crop production, bee-keeping, fish farming, home-science and nutrition, vermi-composting. Involved in sale also. Fish – seed sale is worth mentioning out of all these sale promotion activities.

Entrepreneur in Dairy-farming

Animal Husbandry farm

Achievement: Through extension activities and motivation by KVK and with support of NDRI in 434 villages 70,000 farm families produce 2/3 quintals milk in a day. 30-40 commercial dairy farmers produce 5-12 quintals milk per day. This KVK has a great role to play in strengthening Dairy entrepreneurship. 25 per cent start their own business after being trained here.

8. KVK Sadalpur, Hisar

Brief History : KVK Sadalpur is situated in Adampur tehsil of Hisar district of Haryana. KVK Sadalpur is under the Chaudhary Charan Sing Haryana Agricultural University, Hisar. It was established in 1989. This is the major institutional strength of KVK Sadalpur as it is directly getting in touch with State Agriculture University (SAU) for all institutional support and finances. With the help of SAU, KVK provide various inputs and guidance as per the requirement of the farmers.

Specific Scenario of the district vis-a-vis KVK : Productivity per yield may be increased by variety/seed replacement. Employment may be increased through strawberry cultivation on sand dunes of Hisar district. KVK also plays a major role in curbing the menace of orobanche in Raya. The main constraint of the KVK is that location of the KVK is not in the middle of the district. It is situated at the corner of Hisar district so farmers of the other tehsils of the Hisar district find it difficult to contact KVKs scientists.

Major Interventions by KVK: KVK Sadalpur emphasizes on various technologies for conservation of natural resources such as Laser land leveling for water saving and higher yields, bed planting, direct seeded rice and Micro Irrigation strategies. KVK has intervened in the areas like crop residue management, zero till/happy seeder seeding, strawberry cultivation and variety seed replacement.

Recent Activities: It has conducted various skill development and employment generation training programme such as fruit and vegetable preservation, cutting tailoring, soft toy making, Bee keeping. Seed products, Vermi composting and Dairy farming. However, farmers suggest that permanent Seed sale counter may be set up in KVK in all seasons.

Achievements of KVK: KVK has succeeded in curbing the menace of orobanche in Raya crop. Scientists also achieved success in increasing the productivity of various crops such as Cotton, Sumner mong, Guar, Strawberry, Caster, Wheat and Barley. New crops were also introduced in the district such as Caster and Strawberry.

Team is interaction with progressive farmers at Hisar

9. KVK Tepla, Ambala

Brief History: KVK Tepla is managed by NGO but received 100 per cent grants from ICAR. KVK Tepla is having very good infrastructure and faculty of 10 scientists.

District profile vis-à-vis farming scenario: Water lable is going down in Ambala district due to scanty rain. In this directions scientist suggest Sprinkling water system and development of small ponds and electric connection may be given to the farmers to use the pond water for irrigation purpose.

Major Interventions by KVK: There are three constraints of the KVK i.e. Electricity, Farm Road and Fencing of Farm.

Scientist and Technical staff of KVK Tepla put their serious efforts in increasing the yield of crops, improvement in soil by soil testing and application of right type of fertilizer in crops. Major areas of intervention of this KVK are diversification of cropping system, Resource Conservation Technology, Multiple Cropping, Yield increase by waste management, Value addition of crop productivity, new cash crops and intercropping and intensification.

Recent Activities: KVK Tepla conducts training programmes in Agronomy, Agriculture Engg., Plant protection, Horticulture, Animal Science, Home Science and in Agriculture Extension. KVK also conducts Front line demonstrations (FLDs) and On Farm Trials (OFTs) .

Achievements of KVK : KVK has won the best exhibition award in 2016 at Muzaffar Nagar, Uttar Pradesh in Krishi Kumbh Mela. It has also won the Best Kisan club award for two consecutive years organized by NABARD. Best Scientists awards were given to three Scientists of KVK Tepla.

With Scientists at KVK, Tepla, Ambala

10. KVK Jodhpur I, CAZRI Campus

Specific issue: CAZRI is the only institute in the country exclusively mandated for conducting research on issues of arid zone ecosystem. The mandates of institute include conducting basic and applied research on sustainable farming systems, to act as repository of information on the state of natural resources and desertification processes, developing livestock-based farming systems and range management practices, and generating & transferring location-specific technologies.

Major Hurdle : The major hurdle observed that the KVK neither has the required manpower nor has its own infrastructure as it is located in CAZRI campus. The KVK is running in a rented building without any training hall and its own demonstration farm. As a result, it has major constraint to perform its mandated activities.

The KVK should have its own infrastructure and manpower so that the scientist may initiate their scientific work to guide the farming community.

11. KVK Kota

District Profile : In Kota district the land slopes gently from south to north and is drained by the Chambal. The Chambal is perennial river on which 4 dams- Jawahar sagar, Gandhi sagar, Rana Pratap sagar and Kota Barrage have been constructed for generating power and irrigation.

Activities : This KVK is having different demonstration units, fully equipped with quality audio-visual aids, internet connectivity, physical facilities and boarding- lodging facilities.

Manpower : It has multidisciplinary team of young scientists who work enthusiastically in missionary spirit for undertaking vocational training of farmers, farm women and rural youth.

Mandated Activities

Interaction with Vice Chancellor and KVK Officials

12. KVK Sawai Madhopur

The KVK has only three scientists including Programme Coordinator Inadequate staff strength has been observed a main limitation of the Kendra. A total of seven officials are in position in the KVK.

Activities: The impact of training programme was quite obvious. The farmers remembered quite well what they had learnt in last year's training. To make the situation improve further, there is a need to use practical field oriented methods and encourage learning by doing was revealed during discussion with a group of progressive farmers at the KVK.

Major impact: It provides a clue to manipulate appropriately the factors which have positive association with trainees and also suggest procedures to mismatch the gap between demand and suppy of food and milk.

Mandated activity at KVK Sawai Madhopur

13. KVK Bundi

District profile vis-à-vis farming scenario: South-East and Eastern Rajasthan which is having diversified agriculture situations from rainfed to canal irrigated agriculture. In the Southern-eastern humid plain zone (Rajasthan), the most distinguish feature of Bundi region is a double line of hills running through the districts in the north-east and south-west directions. This range is characterized by hills and ridges, made up of Vindhyan rock, varying in height between 91 to 547 metres above sea level. North-western part of the district is hilly with hard and stony soil, while south-eastern plains have rich black loamy soil. In Kota district, the land slopes gently from south to north and is retained by the Chambal and eastern plains portion. Jhalawar district stands at the edge of Malwa plateau with an area of low hills and shallow plains. The Kendra is equipped with sufficient infrastructure and manpower.

Activities: The Kendra has diversified activities in agronomy, horticulture and animal husbandry.

Glimpse of the Mandated Activities

14. KVK Jaisalmer I

Brief History: The KVK was set up in the year 1992. Its main task is to look after the agro climatic condition of the local area and as per the local requirement of technology has to assist the farming community in the district. It has been observed that the KVK is approached by the farmers because:

1. They are well connected the KVK Jaisalmer and they were of the view that information they receive at the KVK helps them to increase their productivity by at least 10 per cent.
2. The formers informed that they are taking keen interest in Animal Husbundary like Sheep and Goat rearing.
3. The farmers were of the view they should be able to get more information regarding Deseases in the Pomegranate orchards.
4. Farmer also the problem of prices for their products.
5. The farmers in Jaisalmer cultivate Gram, Mustard, Isabghole and cumin, Mooth, Gavaar and Wheat etc.
6. The whole districted having three kind of cultivation i.e., dry land farming, Irrigation through canal and irrigation by Tubewell etc.
7. Farmer also take keen interest in the Burmi- Compost and simple composts etc.
8. The farmers are also making the orchard of Dates and taking the utmost profit out of the cultivation.
9. The farmers were of the view that the crop which been grown by the Jaisalmer farmers should also be cover by the market Support price.
10. KVK needs to procure the machine such as Rotavator, Cumin Cleaning Machine and ground nut thresher etc.
11. The farmers were also of the view that they should be given the knowledge of Date processing etc.
12. The farmers also want information about the pesticides to protect their crops.
13. Soil test facility is required at the KVK.

District Profile vis-a-vis Farming Scenario: Jaisalmer is the most arid district of mainland India and almost entirely a sandy waste, forming a part of the Great Indian Thar desert. The general aspect of the area is that of an interminable sea of sand hills, of all shapes and sizes. The maximum summer temperature is around 41.6 °C while the minimum is 25 °C. The maximum winter temperature is usually around 23.6 °C and the minimum is 7.9 °C. The average rainfall is 176.0 mm. Highest ever recorded temperature was 48.0 °C and the lowest ever recorded temperature being 5.9 °C. Rainfall is negligible and the number of rainy days is very few during the months of July to September.

Major Interventions by KVK: The In-charge of the KVK is motivating farmers to cultivate the dates on their farms few farmers have taken up farming dates in their fields. With the intervention of the KVK, Date farming successfully with the help of this centre. Each plant gives somewhere around 100 Kilograms of fruits and some plants gives even more depending upon the quality of the plant. The co-ordinator also informed us that he has taken a voluntary initiative to develop the nursery for the date plants. The whole orchard as per the information given by the co-ordinator, it is given on rent annually for Rs. 16 lakhs.

Glimpse of KVK activities

15. KVK Jaisalmer II

Issues/Constraints: There is Staff requirement. Boundary needs to be done of the KVK . Quality of water needs to be improved. There are some external factors like distance of the villages from the KVK,which affect the mandated activities of the KVK . General constraints/farm issues in the locality: KVK is next to the Army Ammunition depot. The army is not allowing constructing anything.

Areas of the KVK: Awareness has been generated among the farmers regarding new technology. i.e., dry land farming , moisture conservation and growing wheat without water. It had been very interesting that most of the farmers were growing vegetables. They were growing Chillies, Tomatoes, Potatoes, Cauliflower, Cabbage, brinjal and green onions etc.

Highlighted points emerged out of discussion with the farmers

1. Farmer had raised multiple problems such as the deceases in the crops like tomato, Chilli and the cauliflower etc.
2. They had showed their concern regarding pricing of crops. In pokaran most of the farmers are vegetable growers and therefore they look for market nearby and the facilities by which they could send their product to Bikaner.
3. The farmers were interested to have soil testing as well as the water testing facilities in KVK.
4. The KVK Pokran does not have its own building so the farmers find it difficult to contact scientists in the rented location. The Building of KVK Pokran is under construction
5. Moreover, there is no separate co-ordinator for Pokran. The co-ordinator comes from Jaisalmer as and when there is some programme in KVK Pokran.
6. The farmers are very progressive and aware about the requirements of their farms.

FGD with farmers and officials

A progressive farmer with vegetable cultivation

16. KVK Mathura

The impact of KVK has been beneficial, specifically in terms of increase in farmers income following better market linkages and connectivity, increase in cultivable area, improved soil testing and treatment for crop diseases. KVK has been successful in ensuring improved yields and farmers' incomes despite poor water resources in the district.

The activities of the KVK includes development of Integrated farming services model and organizes training for crops such as mustard and organic farming and entrepreneurship development.

Agricultural junctions by agricultural graduates, has been mentioned as a note-worthy initiative which may be encouraged in future.

Interaction with KVK team and Farmers

17. KVK Belatal, Mahoba

Brief profile/location specific issues : This KVK is working under Banda University of Agriculture and Technology, Banda. The Campus is located near railway station . The district experiences frequent droughts water is not available for Irrigation. The KVK faces problem from stray cattles and wild animals.

Activities: The KVK conducts On-farm testing, frontline demonstrations and organized trainings programs for capacity development of farmers and extension personnel to update their knowledge and skills on modern agricultural technologies

Achievements: It has developed IFS model .It has contributed to value addition of the products and did soil testing and distributed soil health cards to large number of farmers and contributed to entrepreneurship development.

Farmers are participating in training program

Sesame crop under CFLD program

18. KVK Kurara, Hamirpur

This KVK is working under Banda University of Agriculture and Technology, Banda. The KVK is working with the following constraints:

No Farm field surrounding a Boundary wall, lack of scientific & technical as well as supporting staff. The KVK does not possess any farm equipment or vehicle.

The KVK is working with stable seed hub project for seed production pulses crop and organizes training for capacity development. It is also running NICRA project.

It has been found that the KVK has placed orders for equipment etc. KVK building has been completed six SMSs will be appointed within a month.

Vermi-compost

Progressive farmer

19. KVK Baghpat

Location: This KVK is situated at Delhi – Saharanpur highway 20 Km away from Delhi behind the Khekra Tehsil. The KVK as well as the district faces the problem from wild animals such as Monkey, Cow etc. and high PH level of soil of farm (i.e. 8 to 10 per cent).

District Geography & Climate: Average rainfall is 768mm, maximum temperature is 41.55^{0}C, and minimum temperature is 4.99^{0}C.

Agricultural Profile: Total area under agriculture 1,09,000 ha, percentage of small and marginal farmers 87.6%, percentage of area under cultivated land under small & marginal farmers 52.2%, percentage cultivated area under cash crop 44.4%, cropping intensity 159%.

There are some issues/constraints which create hindrances to the activities of this KVK:

Internal Factors-

Inadequate staff strength, interrupted electric supply, attack of wild animal in KVK farm, only one tube well is functioning, non availability of garage, non-availability of threshing floor, non-availability of implement shade, lack of fund for repair and maintenance.

External Factors-

Non availability of funds on time.

Issues which affect adoption of disseminated Technologies by Farmers

a) High cost technology like lazer leveler, high infestation of wild animal.

b) Farmers are not ready to take risk.

c) Non-availability of credit and subsidy.

The KVK provides guidance in the areas of pure bio-farming with vermi-compost, vermi wash, neem oil, neem cake, cow urine, bio-agents, green manuring, improved variety and integrated farming with crop rotation.

20. KVK Bareilly

KVK Bareilly is located between Tarai and Mid-Western Plain agro-climatic zone and administratively grouped into western zone (Rohilkhand Region) of Uttar Pradesh. Pilibhit and Shahjahanpur district on east, Rampur district on west, and Udham Singh Nagar district on the north and Badaun district on south side surround it. KVK Bareilly has established several demonstration units for instructional purposes viz., NADEP composting, vermi-composting, bee-keeping, crop-cafetaria, fodder crop cafeteria, scion bank of fruit plants, and Integrated Farming System model on fish cum goat, fish cum dairy, fish cum duck, fish cum poultry, fish cum horticulture etc. which are visited by thousands of farmers round the year.

The KVK takes new initiatives for disseminating awareness using social media such as KVK Bareilly WhatsApp group, video film of successful farmers/farm women/ rural youth/ Swachch Bharat Abhiyan , Youtube and face book page of several farmers interest groups, regular uploads of daily activities on KVK Knowledge Portal, regular upload news of the activities conducted on IVRI website, regular publications and good quality quarterly News Letter and success stories etc.

With officials and Progressive farmers

Three posts were of SMS (Fisheries, Animal Science/Veterinary Science and Soil Sciences), three posts of Programme Assistant and one post of Tractor Driver are vacant at present. One covered threshing floor, one godown and tractor, farm implements shed are urgently required. The KVK has fishery based IFS models and going to start new ponds, therefore one more tube well is required. Home Science Lab is working very nicely but it requires additional infrastructure and facilities for preparing value added fruits and vegetable products. One Farmers hostel with 20 rooms, kitchen, and dormitory are urgently required

21. KVK Patna

Farming Scenario: The KVK Agwanpur, Barh (Patna) has been established on 1st August, 1992. Patna district, in general and Tal lands, in particular is specifically popular for Rabi pulses like lentil and gram and oilseed like rapeseed-mustard. At the same time the uplands of the district is quite suitable for kharif pulses like red gram, oil seeds like castor and seasamum. Diara land of the Patna district is famous for the production of the almost all crops of Rabi and summer season.

Challenges: The centre is making the latest agro-technologies under the prevailing agro-eco system available to farmers. Keeping in view the area of the district, the numbers of scientists are not enough as reported by the Programme Coordinator of the KVK. The KVK is located very far from the main town. Animal husbandry, crop science and horticulture are the key functions in the KVK. There is no boundary wall around this KVK as a result substantial amount is being spent on night gaurd.

Activities : The centre is also dedicated to organized activities for dissemination of technologies and conducts front line demonstration in consultation with the subject matter specialists for testing, refining and documenting technologies for developing region specific and sustainable land use system.

Demonstration Farm of KVK, Patna

22. KVK Samastipur

This KVK was established June, 2004 under the administrative control of Rajendra Agricultural University, Pusa, Samastipur; Bihar observing the possibilities and potentialities of growing cereals, pulses, fruits and vegetables as well as medicinal and aromatic plants in the alluvial fertile tracts of Samastipur district.

The recommendations based on the On Farm Trials are well adopted by the farmers and a number of Front Line Demonstrations have also been conducted for broad basing of the technology. There was an overall increase of 30-60% in yield over Farmers Practice apart from saving in cost of cultivation and conservation of natural resources. The short and long duration training programmes, both on campus and off campus, was very much effective in employment generation and all round development of the farmers as well as of rural youths. Cultivation of medicinal and aromatic plants, vermin composting, tie and dye, organic farming, resource conservation technology along with Integrated Farming System and fruit and vegetable preservation were the prime concern during the year that attracted the young generation and a number of rural youths could get their agri-enterprises established through self-employment.

Efforts by the KVK on natural resource management, introduction of drought and flood tolerant varieties, conservation tillage, staggered rice nurseries and innovative approaches of establishing Custom Hiring Center for assured and timely sowing of crops have tremendous effects on increasing and sustaining crop production. The prevailing Rice-Wheat cropping system are being diversified and intensified to suit the demand of the farmers as well as to the micro-climatic condition and efforts are being made to have food security, nutritional security and above all the economic security of the farming community.

The contribution of KVK in bee keeping activities has been observed very substantial in the district as the farmers are adopting the technical knowhow from the Kendra as and when they need it.

FLD/OFT sites of KVK, Samastipur

23. KVK Vaishali

The district of Vaishali came in to existence on 12/10/1972. The District is located at 25 to 30 North latitude and 84 to 85 east longitude. The District is surrounded by river Ganga in south, Gandak in west District, Muzaffarpur in north & Samastipur in East. The District is in semi tropical Gangetic plane. The state capital Patna is linked with famous Mahatma Gandhi Setu. The District is spread over 2036 sq km area.

Major cropping pattern is horticulture followed by maize pegion pea etc. The land is fertile. Somewhere the land is irrigated and somewhere cropping is done under rainfed condition. Banana cultivation is done widely here. Cropping is done in low land under rainfed condition. The Fertile land is cropped with coarse paddy and green gram/wheat.

The area around the Vaishali district is very good for horticulture product, the KVK has played very important role while disseminating techniques through their own farms to the farming community of the district. The KVK

has also set up the community radio station, which is not functional because of non availability of technical staff and required equipment.

Capacity Building Programme at KVK, Vaishali

24. KVK Gaya

About KVK Gaya: This Kendra is located at NH-82, Gaya- Nawada road. The nearest Railway Station and private bus stand at Manpur is about 2 Km North-east and west respectively and Gaya railway station is about 6 Km west from this Centre.

Activitie: The KVK is successfully running Goatery demonstration unit. 124 farmers/farm women were trained with live example to establish small goatry enterprise at local level by themselves for income generation. Presently 20% farmers adopted this technology and enhanced about 20% their family income. Three spawn and Mushroom production units have been running under the guidance of KVK, Youths have strengthened their enterprise after training. Use of quality seeds of cereals, pulses and oilseeds bring the changes in productivity by increasing up to 25-30%. Farmers were also trained for quality seed production to fulfill their needs. Plant seedlings and samplings of different vegetable crops bring changes in productivity by 20-25 %. Adoption of technology brought more than 36% change in the vegetable intake of the family and also enhances their annual income about 10-15%.

Issues / constraints in performing the mandated activities: Incomplete Boundary Wall, incomplete staff quarters, lack of demonstration unit, malfunctioned seed processing unit, lack of food processing laboratory, vacant posts of SMS – Soil Science & Horticulture are some of the issues hindering the activities of the KVK.

Issues in adopting the disseminated Technologies by Farmers: Lack of resources, delay in sowing and harvesting due to lack of water and labour, lack of risk taking ability, problem of Blue Bull, inadequate marketing and processing facilities.

General constraints / farm issues in the locality : Management of grass hopper in rabi crops, terminal heat stress management in wheat, management of wild pea (weed) in rabi pulses and wheat, management of infertility in dairy animals, management of wilt complex in pulses, management of yellow vein mosaic virus in okra, fodder management in draught conditions, short duration yielding draught tolerant variety of paddy is needed.

Remarkable / highlighted achievements of the KVK : Production and up-scaling of draught tolerant variety of Paddy – Sahbhagi, Oilseeds and pulses through CFLD programme, wheat through ZT technology with residue retention, entrepreneurship development in vermicomposting, Backyard Poultry

Demonstration unit

An entrepreneur in his dairy farm

25. KVK Garhwa

Brief History: The erstwhile Garhwa Sub-division of Palamau district consisting of 8 Blocks was separated from Palamau district as an independent district "Garhwa" with effect from 1st April 1991. It is situated on South-west corner of Palamau division, which lies between $23^0$60'and $24^0$39' N latitude and 83 ^{0}22' and $84^0$00' E longitude. The district is surrounded by river Sone in the north; Palamau district and area of Chhatisgarh in the south; Palamau district in the east and Sarguja district of Chhatisgarh and Sonebhadra district of U.P. in the west. Garhwa district is a part of Palamau Commissionery consisting of 14 blocks and two sub-divisions namely Garhwa & Nagar-Untrai.

District Profile vis-a-vis Farming Scenario: In Garhwa district more than 40 per cent area of the total land is under forests. Forests are great sources of the revenue. Many of the villages of this district lie in thick forest area. Garhwa District lies partially under the rain shadow area.Although yearly average rainfall is sufficient for agriculture work but unequal distribution of seasonal rain affects the main crops badly. The climate of this district is dry and bracing. From the onset of the Monsoon by the middle of June, rainfall rapidly increases reaching the peak level in August. The annual variation of rainfall is not much. December and January are the coolest months. By March temperature begins to rise steadily. In May and early part of June the maximum temperature can be as high as 47 degree Celsius on individual days. Humidity is generally normal in this district, except in Monsoon months. The district is rich in mineral resources. Deposits of Graphite, China clay and Granite are also available in this district.

Major Interventions by KVK: KVK scientists have launched a mobile App for the farmers to have necessary information as and when needed in real time this do wonders from the farmers, just at the dial scientist are on line and provide whatever they can do on their part.

- Considering the increasing milk production with collaboration of KVK scientist and state government one dairy chilling plant is on the construction stage and may soon cater the interest of the local dairy produces.

Staffing or appointments are not being made in the top position and functioning in In charge basis, this affect the functioning of the KVK.

Glimpse of Interaction with Stakeholders

26. KVK Palamu

Brief History: Krishi Vigyan Kendra is a frontline extension programme and innovative institutional model of the Indian Council of Agricultural Research. It is devoted to undertake the activities of technology assessment, refinement and dissemination through on farm testing, frontline demonstration, vocational training of farmers, rural youth, farm women and extension functionaries. Apart from this, KVK functions as an innovative agency for extending state of art services like online advisory and consultancy services.

District Profile vis-a-vis Farming Scenario: The Latitude and Longitude of Palamau district is between 23 degree 50' and 24 degree 8' north and between 55'and 84 degree 30' east respectively. The average altitude of Palamau is 215 mt. above the sea level. There is a great variation in temperature of the district. There is a difference of about 30° between the normal maximum and normal minimum monthly temperature and it is not unusual for an equal wide variation to occur within the 24 hours. The physiographic characteristics of the district are rich. It has waterfalls, hills, and land with avalanches. Palamau district is surrounded by green forest.

Major Interventions by KVK:

1. Most of the farmers accepted that they are getting required technical support and information about the farming they are doing. Here the KVKs scientists role is very clear and co-ordeal toward the farmers and creating a lasting bondage between scientist and farmers and contributing for a better agriculture scenario in the india.
2. Shortage of manpower in KVK hampering the performance of mandated core activities and state government higher officials also issue certain circular which KVK scientists have to provide the information or take part in the programmes this also deviates scientists from their core activities.
3. KVKs are having no clear cut status and identity, Agriculture University is having the financial and administrative control and ICAR is also having certain control in appointment and benchmarking etc.

Glimpse of the KVK activities

27. KVK Jabalpur

Background of KVK Jabalpur: KVK Jabalpur is one of very few outstanding KVKs surging ahead in all activities with its maximum outreach to farmers and implementing all emerging technologies. Located in the campus of JNKVV, and having the mentor ATARI close to its office, the KVK Jabalpur is getting excellent logistic, technical support from the Research systems of agriculture.

KVK is well equipped with all infrastructural, farming facilities in the huge campus. It is exploiting all the modern tools of Information Communication & Technology (ICT) in all its extension activities and dissemination of information and technologies.

Some of the Milestones Achieved by KVK Jabalpur during the past 5 years:

1. More than 500 OFTs and 1000 FLDs
2. Trained more than 10,000 farmers, youth and farm women
3. Organised more than 600 sponsored programs to benefit rural youth, farmers
4. Achieved a foot-fall of 50,000 farmers at its KVK with diverse problems of farming

Recent Contributions & Innovative Practices:

1. Successfully carried out bet yielding varieties in pulses, oilseeds that made huge impact in the district agrarian dynamics.
2. Envisioning the avenues to enhance the income of rural households, developing competencies in those avenues, and conducting training programs in those areas.
3. Mentoring and grooming of progressive farmers towards organic farming, integrated farming, intercrop farming, vermin composting etc.
4. Maintaining a database of 6,000 farmers alongwith the successful technologies to create synergy among farmers through a network of villages in the district.

Display of products by women entrepreneurs

Demonstration of Technologies

28. KVK Katni

Background of KVK Katni : Krishi Vigyan Kendra (KVK), Katni was established in the year 2006 in a sprawling 50 acres and located at Piprudh, Katni. It has set the goals and priorities keeping in view the agrarian conditions of the district. Some of them are (a) cost-effectiveness & refined technologies to boost productivity, (b) conducting training programs to empower the weaker sections of the society for livelihood security, such as candle making, bakery products, fruits & vegetables preservation.

Recent Initiatives: Innovative programmes like e-linkage, kisan mobile sandesh, crop cafeteria, technology park, meadow orchard, rejuvenation of old orchards, adoption of SRI in paddy and ridge and furrow system of planting in soybean etc. have facilitated farmers and entrepreneurs.

Compared to other districts, non-accessibility of the villages to KVK Katni, due to its geographic conditions, the KVK has taken initiative with the motto of "Reach the unreached". Following bottom-up (participatory) and need oriented approach the KVK has earned credibility and visibility in Katni district.

The agricultural productivity of major crops viz., soybean, paddy, wheat, gram, mustard has increased significantly. By adopting three significant inputs viz., seed, variety and technology replacement, the average agricultural production of the district has increased by 30% and also the cost of cultivation reduced by 20%, this 30:20 formula make the farmers financially sustained.

Initiatives of KVK in promoting poultry farming Development of Fish pond in the campus

29. KVK Sundargarh II

Brief History: Relatively the new KVK Sundargarh-II came into being in 2012 located in the industrial city of Rourkela in Odisha apparently falls under grade C. However five years periods are more than enough time to testify its potential.

District Profile vis-a-vis Farming Scenario: The district spreads over an area of 9,712 sq km which is 6.23 per cent of the State area. It is surrounded by Jharkhand State in the north and Chhattisgarh State on the north-west. The districts is also bounded by Jharsuguda, Sambalpur and Deogarh districts of Odisha on the south, and Keonjhar and Angul districts on the east. It is located between $21^0$35' N and $22^0$32' N latitudes and $83^0$32' E and $85^0$22' E longitudes.

Major Interventions by KVK: Since the KVK was set up recently, it seems there was no on farm activities initiated as yet. Although the government of Odisha has allocated 50 acers of lands to the Odisha University of Agriculture and Technology (OUAT) for KVK activities in the outskirts of the town, it has entangled with some issues. It was told that when the university started constructing boundary walls on the farm land that some of the adjoining land owners have filed a petition for one or other reasons and hence, the whole land is under dispute, as such no party is allowed to uses the land apparently. Hence, there is no on farm activities as such carried out. There are farm agriculture equipments like tractors, rotavator, excel floor paddy thrasher, tillers, power weeders, cultivator and cage wheel, sprayer and oil engine are wrapped around are kept in a safe custody on the congested office premises. Though it appears these equipments are not put to use on filed, officials claimed that agriculture engineering student uses these equipments for demonstration and learning. It was also suggested that the farmers be allowed to avail the benefit of using the same for actual use on field with nominal charges.

Glimpse of the Mandated Activities

30. KVK Puri

Brief History: KVK Puri is one of the best functional KVK in the State and has locational advantages. KVK was established in 2006 but still lacking for physical infrastructure. The KVK is functioning is in a State Government Departments Building which is lacking many infrastructure. There huge land under (16 Hectares) the KVK but due to lack of fund the physical infrastructure has not been developed so for.

District Profile vis-a-vis Farming Scenario: Puri District is a coastal District on the eastern part of Odisha, India. This District needs no introduction, being the abode of Lord Vishnu, most popularly known as Lord Jagannath. This District derives its name from the heritage city of Puri, one of the four pilgrimage centres of India. Covering an area of 3051 sq/kms, the District may be divided into two dissimilar natural divisions-the Littoral tract and the Level alluvial tract. It is also located at 19' 28 N Latitude 26' 35 N, 84' 29 E. Longitude 86' 25 E. Its altitude is at sea level. The population of the District is 15, 02, 682 (as per 2001 Census) and the density of population is 431 people per sq. km. The rural population is 12, 98, 654 and the urban, 2, 04, 028. SC population is 2, 73, 917 and ST is 4, 482. The District is quite literate in the sense that its literates number 1, 024, 523 as against the illiterates numbering 4, 78, 159. Paddy, wheat, mung, biri, kulthi and groundnut are some of the major crops grown in the District. The number of rivers flowing through the District helps in sustaining the agriculture. The District has tropical climate due to close proximity to the Bay of Bengal,. District is famous for the world over for Handicraft and Cottage industries, its original source being the temple craft of Lord Jagannath and the Sun Temple at Konark.

Major Interventions by KVK:

1. Every third Tuesday of the Month have a meeting with the entire stakeholder for convergence of the KVKs' activities. What was proposed during the previous meeting what are all the action has been taken so for like that every department's actions were evaluated during this meeting for the betterment of farmers in the district.
2. With collaboration with Lead Bank, KVK is helping the active farmers to get loan from the Bank for their expansion of farm activities and starting new processing and value addition units.
3. KVK is doing all the transaction without CASH – A complete CASHLESS Transaction is under implementation in the KVK. Up to dated cash book maintenance is on the table due this cashless transactions.
4. Major Diseases (Frequent and regular Diseases in all the Major Crops) of the Crops in the district has been almost controlled – it's one of the biggest achievements of the KVK in the district.
5. Developed 50 + Integrated Farm Services farmers in the district since inception of the KVK district.
6. More than 50 farmers cum Entrepreneurs (especially on Mushroom, Food and Nutrition, Organic Products, Process and valued Addition, Fisheries etc.) were also developed by the KVK since 2006.
7. Self Help Group Linked Producers group has been developed by the KVK for better marketing options.
8. In collaboration with Food and Nutrition Board and District Administration – Testing Lab has been established by the KVK for testing the produce of the farmers and also assisting farmers for selling their produce.
9. Popularizing the Goat farming as a alterative source of the Income throughout the year is also one of the big achievement of the KVK.
10. Insisting farmers for Bee Keeping all most every villages through SHG is keeping the Bee Keeping for Honeybee Business.

Recent Activities:

1 A convergence meeting at every month is the best option in place for cooperation and networking of the line departments and similar organizations.

2 How can the farmers Income from Farm may be increased

- Reduction of inputs costs – Less use of Chemical fertilizers and use of bio-fertilizers and manures
- Keeping multiple crops for flow of income all the year
- Goat / Fish and other allied activities – for addition income generation
- Systematic cultivation and cropping patter for better yield

Faculty of the Institute is interacting with Farmers

31. KVK Ganjam II

Brief History: KVK Ganjam II (KVK Berhampur) was established in 2012. Except farm land the KVK is not having any other infrastructure. KVK is operating in rented building and managing agriculture department halls for the farmers training. Farm land has been developed as sample farm for training and display to farmers. The entire farm related demonstration units have been well developed and kept for demonstration. It gives the KVK teams effort to show their performance with the available resources.

District Profile vis-a-vis Farming Scenario:

Ganjam district is broadly divided into two divisions, the coastal plains area in the east and hill and table lands in the west. The Eastern Ghats run along the western side of the district. The plains lie between the Eastern Ghats and the Bay of Bengal. Since the hills are close to the sea, the rivers flowing from hills are not very long and are subject to sudden floods. The plains are narrow because of the absence of big rivers. The coastal plains in the east contain more fertile and irrigated lands. Towards the centre and south it is hilly with beautiful well watered valley. The south eastern portion is fertile. The extreme north east is occupied by a portion of the famous Chilika lake. Spreading over an area of 8206.0 sq.km, it is surrounded by Kandhamal in the North-west, Nayagarh in the North, Khurda in the North-east, Gajapati district in the west and Bay of Bengal in the South-east. On its Southern periphery the district borders the state of Andhra Pradesh.

Major Interventions by KVK:

1. Started introduction of multiple crops – especially the horticulture crops which can give better yield and income to the farmers.
2. Introduced the Paddy Variety which can sustain during rainy seasons.
3. Mushroom (Ganjam district is the second largest Producer of the Mushroom) and Fishery has been made profitable farm activities in the district.
4. Assisting farmers for marketing their products.
5. Introduced the Tomato Variety which is giving very high yield and good Price.

Glimpse of interaction with the officials of KVK

32. KVK Ganjam I

Brief History: Krishi Vigyan Kendra Ganjam-I was established in the year, February 1985 to meet the extension needs of the district of Ganjam, Odisha State. Geographically it is located at latitude of N 19° 57' 4.305" and a longitude of E 84° 35' 42.9072" with an elevation of 27m and 58.4m of East & South Eastern Coastal Plain Zone and North Eastern Ghat Zone respectively of above the mean Sea level. The principal Kharif crops grown in this district are Paddy, Maize, sugarcane, and Rabi crops are Groundnut, Mustard, Greengram, Blackgram, sunflower and Vegetables.

District Profile vis-a-vis Farming Scenario: Ganjam district is situated in the coastal region of the state surrounded on the north by Khurda district, on the east by the Bay of Bengal, on the west by Kandhamal and Gajapati district and on the south by Andhra Pradesh. It lies between 19.00' and 20-17' of the Northern Latitude and 84-6' to 85.11' of eastern longitude.

Major Interventions by KVK:

KVK is one the oldest KVK in the state. KVK is having a very good infrastructure including the farm lands. Farm is maintained with multiple crops to demonstrate to farmers. The quantitative data provided by the KVK is visible in the fields.

- Apart from the mandated activities there is multiple non-mandated activities is routed through the KVK – which is affecting the delivery of mandated activities.

- Limited resources for technical activities – there is huge demand from the farming community for extension services of the KVK – to expand the area under coverage.
- Contingency fund also to be increased.
- KVK is not having own Farm Machinery (TRACTOR) - hiring the Tractor is getting financial burden to the KVK's budget.
- Vacant position of SMSs – three SMS post is vacant - more than 50 per cent staff positions are vacant in the KVK.
- Fund release of Director of Extension is getting delayed.
- More field staff is required at the KVK to cover wide range geographical area.

Team with KVK Team at their Demonstration Unit of the KVK

33. KVK HOWRAH

KVK Howrah is maintaining all the physical infrastructure and demonstration units. KVK is better placed with demonstration units and trail land for technical demonstration. However, the KVK requires more fund to get some more machineries / farm equipments for the farmers Service Centre - there is huge demand from Farmers for more machineries due to non- availability of labour. KVK also demand for some more technical and support staffs to maintain the huge infrastructure and demonstration units under the KVK.

Not getting the machineries is the only issue highlighted by the farmers in the region. Sudden and unexpected natural calamities is also affecting the crops and creating loss to the farming community. Water logging is one of the main problems which affect the yield. A systematic cultivation of paddy and horticulture crops is adopted by many farmers – however, expected yield is not getting some time due to water logging after the rain and flood. Farmers are coming forward to adoption the new technologies and advises proposed by the KVK for better yield and income.

- Multiple cropping patterns are highly concentrated advice from the KVK for the purpose.
- Advising farmer to move towards integrated farming system to get normal income flow throughout the year.
- New Varieties of Paddy Crop to manage the water logging problem.
- Advises and guidance on alternative use of land for better income during short period of time.

- Advice to farmers for moving towards horticulture crops which give better income – There is sizable acres of land has been already covered under Horticulture Crops.

Agricultural Land is degrading by day by day – Alternative/ multiple use of available land is only source getting desired level of yield. Labour is another problem in the district – Due to higher wages and availability of jobs around the district the labour for farms is not available.

- New Paddy Variety to manageable with water logging problems – System of Rice Intensification (SRI) technique to get better yield
- Developed more Entrepreneurs
- KVK's focused plan of action for Tribal in the District.
- Demonstration on process of recycling techniques to Farmers Club Members, Self Help Group Member and Staffs of the Government Departments
- Due to its location advantages (Near to the Kolkata City) there is huge potential for marketing of the farms produces. Farmers are willingly to come forward to take up the initiatives of the KVK. KVK's team and Project Coordinator are taking much more interest to their day to day performances. Various steps have been taken to enhance the farmer's income under the coverage of the KVK. The KVK is highly deserved for the position of the rank.

Farmers at the meeting in KVK

Tribal Men Carrying the Paddy from Field

34. KVK Darrang

The District of Darrang was created with effect from July,1983 converting the erstwhile Sub-Division of Mangaldai. The name Darrang was derived from the Bodo word Dourang, which means 'Lilabhumi' (Playground) of Gods. According to Scholar Late Dineswar Sarma, the word Darrang came from Dawrang which means gate, as there was direct entry to Bhutan and from there to Nepal, China etc. Gradually, this was known as Darrang.

The district in general is considered to be plain. On the north, there exist the Udalguri District and mighty Brahmaputra flows along the southern boundary of the district . The main tributaries of Brahmaputra in this district are Barnadi, Nowanai, Mangaldai and Dhansiri. The forests within the district provide good amount of timber to the timber units. The climate of the district is congenial. In the winter, the northern part of the district is colder than the rest of the district since it is covered by hills and forests of Udalguri District. The average temperature ranges from 10° to 30° C. Average annual rainfall is about 2120 mm.

The soil of this district is very fertile for cultivation and the main crops are paddy, oilseeds, sugarcane and jute. The area is also known for its considerable tea productions. The main horticultural products are orange, coconut, pineapple etc. In addition, the district is rich with sizeable production of vegetables. This KVK does not have its own building and demonstration unit. There is crunch of manpower also.

35. KVK Udalguri

Udalguri is one of the 27 districts of Assam state in north-eastern India. Udalguri town is the headquarters of the district. The name of the district is derived from its headquarters, Udalguri. There are three traditions regarding the etymology of Udalguri. According to one tradition, the name is derived from Odal (a tree) and Guri (roots or surrounding) and it was named because originally the town developed around an Odal tree. According to another tradition, this town derived its name because this place was originally a hermitage of sage Uddalaka. According to the third tradition, the name is derived from two Bodo words Ordla (wide and spacious) and Gundri (powdered object).

This district was formed on June 14, 2004 as one of the four districts under the Bodoland Territorial Council. This district was carved out by bifurcating Darrang district. The territory of the present district was earlier Udalguri sub-division of the undivided district. There are Hindu,Christians and Muslim population living together in the district. This was a very peaceful place till mid 80s but later on various communal clashes took place from time to time. Late Jojaram Sharma was one of the prominent India freedom fighters from Assam lived here.

There is an old Namghar (Assamese Worship Place), an old Hanuman temple and an old Baptist Christian church in the Udalgiri town.

This district is bounded by Bhutan and West Kameng district of Arunachal Pradesh state in the north, Sonitpur district in the east, Darrang district in the south and Baksa district in the west. Area of the district is 1852.16 km². There is inadequate human resource in this KVK. The KVK does not have its own building and demonstration unit.

Demonstration Unit at Udalgiri

36. KVK Kamrup

Brief History: The Present Assam was referred to as Kamrup in many ancient Indian literature. It was also known as Pragjyotishpur due to the astrology (Jyotish Shashtra) practices that prevailed in this part of the country during that time. However, "Kamrup" became a more predominant name in the later part of the history.

District Profile vis-a-vis Farming Scenario: Kamrup District is situated between 25.46 and 26.49 North Latitude and between 90.48 & 91.50 East Longitude. It is bounded by Udalguri and Baksa districts in the north, Meghalaya in the south, Darrang and Kamrup Metropolitan in the east and Goalpara and Nalbari district in the west. It has a total geographical area of 4, 34,500 acres.

Major Interventions by KVK: KVK Kamrup is one of the best KVKs in the country The locational advantages and the availability of Infrastructure and other resources at the KVK is best to highlight to all other KVKs to follow. The team at KVK is also showing high enthusiasm in delivery of services to farmers. The KVK has got many awards and recognition. The KVK is running many sponsored projects which is also helping them to generate their financial resources. With Rs. 35 Lakhs Cash Award for their best performance at National Level - they utilized the entire money for the renovation of Training Halls and Farmers Hostel Buildings. This kind of motivation is tempting the KVK team to perform better – these all will help the farmers in the region to strengthen their livelihoods.

A glimpse of visit to KVK Kamrup

37. KVK Upper Subansiri

Brief History: The Upper Subansiri district derives its name from the Subansiri River which meanders through the entire length of the district. For a long period it was a part of the Subansiri district with headquarter at Ziro. A circle head quarter was established at Daporijo, in early 1953 under Subansiri frontier division. Later in 1957 additional political officer was put in-charge of the Daporijo sub-division. In 1965, the additional political officer was redesignated as additional deputy commissioner. In 1980, this sub-division of Daporijo was declared a full fledged district under the charge of a deputy commissioner. The district was further bifurcated into two districts: Upper Subansiri and Lower Subansiri. Ziro which was the district head quarter of erstwhile Subansiri district has remained as head quarter of newly constituted Lower Subansiri district. Daporijo has been declared as the head quarter of Upper Subansiri district. Krishi Vigyan Kendra Upper Subansiri is a centrally sponsored non movable technological scheme by ICAR for Upper Subansiri District under the aegis of State Department of Agriculture, Govt. of Arunachal Pradesh.

District Profile vis-a-vis Farming Scenario: Upper Subansiri district is a mountainous tract in Arunachal Pradesh which covers approximately between 7032 sq. km. of area, at latitude between $27^0$45"N and $28^0$13"N and longitude $93^0$13"E and $94^0$36"E. is bounded by Tibet in the north, West Siang in the east, West Siang and Lower Subansiri district in the south and Lower Subansiri district in the west. The MacMohan line border is China at north. The total population of the district as per 2001 census is 55,346 out of which 28,240 are male and 27,106 are female. Total schedule tribe population of the district is 11,754 comprising of Tagin, Galos, Nyishi. Scheduled caste population is 99. Total literacy of the district is 50.09% out of which 58.81% is male and 42.74% is female. Density of population is 8 per sq.km.

Major Interventions by KVK

- Farmers follow mono-cropping which can be encouraged to adopt multiple cropping systems.
- Farmers are using low yield local varieties which can be replaced with HYV.
- Population density is very low so there are possibilities of area expansion of the farm.
- Farmer's income can be doubled by ensuring the method of "Seeing and believing" i.e. practical assessment in the KVK's farm to show farmers.

- KVK is continuously working to motivate farmers towards new technology.
- KVK is adopting model village for doubling the farmer's income.
- Frequent motivation of Farmer's Club, NGO and Rural Development Societies by Kendra for doubling the farmer's income.

38. KVK Andro, Imphal East

The overall activity of KVK Andro has been good except for some difficulties on infrastructure front. The KVK Andro does not have office premises on its own. The KVK has been using the space meant for horticulture department of its university. There is no laboratory of its own. Similarly it does not have storage facilities and sheds for farm equipments. There is no provision for farmers' hostel. Residential quarters, meant for the university, have been allotted to the KVK staff. Livestock is vulnerable to unforeseen circumstances during night. Variety of flora, some medicinal plants and fauna are seen around the KVK campus.

Despite all hardships the KVK Andro performs all the activities in general such as intensified mono crop-paddy, integrated farming system, water harvesting farm tools, organic farming as a means to conserve soil health and agriculture and value addition .

Many of the farmers are engaged in integrated farming that involves more than one activity symbiotically augmenting the growth of one another. Cluster farming activities are also part of their technology testing fields.

In the long run the KVK needs to have its own infrastructure. It should utilize the accumulated revolving funds also for constructive purpose.

Integrated activities at farmers land

Integrated farming at farmer's field

39. KVK East Khasi Hills

Brief History: The KVK is functioning under State Government Departments. The way of functioning and administrative set up is slightly different from other KVKs in the country. However, the KVK is performing the mandates as per the direction of the ICAR. The presence of the KVK in the district has made significant changes in the farming.

District Profile vis-a-vis Farming Scenario: The Khasi Hills District was divided into two districts, viz the East Khasi Hills District and the West Khasi Hills District on 28th October 1976. On June 4th, 1992, East Khasi Hills District was further divided into two administrative districts of East Khasi Hills District and Ri-Bhoi District. Shillong is the district headquarters of East Khasi Hills District. The district consists of eight Community and Rural Development blocks at present. East Khasi Hills District forms a central part of Meghalaya and covers a total geographical area of 2,748 sq. kms. It lies approximately between 25°07" & 25°41" N Lat. and 91°21" & 92°09" E Long. The northern portion of the district is bounded by the plain of Ri-Bhoi district gradually rising to the rolling grasslands of the Shillong plateau interspersed with river valleys, then falls sharply in the southern portion forming deep gorges and ravines in Mawsynram and Shella-Bholaganj, community and rural development block, bordering Bangladesh. The district is bounded by the Jaintia Hills District to the east and the West Khasi Hills District to the west.

Major Interventions by KVK: District is slowly moving towards Organic Farming and the KVK is playing major role to this and it is one of the highlights of the KVK. As the KVK is under the State Government Department of Agriculture there is complete convergence of activities. There is periodic meeting between these line departments for the betterment of the farmers. KVK has produced 25 packed items – all these items processed and value added one. There is huge demand marketing potential for these items.

Clips from KVK East Khasi Hills

40. KVK Kohima

The major issues/hindrances to effective functioning of the KVK, which came up in our interactions included: connectivity, infrastructure and funding.

The KVK is located in a remote region in North Kohima and lacks the physical infrastructure to effectively cater to the needs of most of the farming community in the district. It was suggested that a sub-centre of the KVK may be constructed closer to the southern region which is underserved. The insufficient funding of the KVK is manifested in numerous related issues such as irregularity of fund release for example, with regard to salaries, lack of adequate infrastructure (such as farmers' hostel, staff quarters, guest house, poly-house, vehicle), and scope of service delivery (such as in terms of operational expenses). In addition, it was mentioned that the KVK

infrastructure should be judged in light of the fact that though the KVK was established in 2007, it shifted to its present compound only in 2014. Notable operational deficiencies mentioned included - inability of the KVK to transfer technology due to lack of adequate infrastructure for irrigation in the field; logistic difficulties regarding procurement of soil samples, soil testing and lack of source for distilled water; and under-utilized potential for Integrated Farming System model.

Farmers commented that overall impact of the KVK has been beneficial. Farmers cited improvement in income generation through diversification (alternatives to indigenous jhum cultivation) and introduction of technologies such as SRI across most villages. The alternatives introduced include animal husbandry, fisheries, maize, cabbage and cultivation of other horticultural crops. The officials and farmers pressed for infrastructural development in the field and availability of assistance in terms of grants and subsidies.

Visiting the Demonstration Units

41. KVK South Goa, Margao

The KVK possesses good Infrastructure, adequate soil testing laboratory with all required testing tools and equipments, good team with specialized person in different fields. There is no problem of fund flow. The KVK has organized many farmers' trainings programmes. There are progressive farmers trained by this KVK who have been able to generate income through other sources. However, because of non reporting of information as asked in questionnaire due to poor record management system and frequent transfer of staff, the KVK has been categorized in C category.

Since life style is high in the locality, availability of labour is a major constraint, Farmers prefer traditional techniques and are mostly pursuing agriculture as a secondary occupation. Labour cost is high in the region thus increasing input cost of farming.

Poly-house in KVK

People in this locality, depend very less on agriculture and they are more inclined towards tourism.

KVK in an experiment on reducing soil acidity found that farmers in Sanguem, Quepem, Canacona, Salcete and Mormugoa face difficulties owing to acidity in the soil and has initiated adding lime to the soil. This experiment

has resulted increase in yield. The activities of this KVK related to dissemination of High Yielding Varieties of Paddy, plant grafting, soil testing, organic farming & market linkage for farmers are leading to significant improvements in yield. The introduction of 'transplanter' machine to farmers has reduced the cost of labour . This KVK is also producing and up-scaling medicinal plants. The KVK has introduced the System of Rice Intensification (SRI), a new technique in rice cultivation which has been very successful.

Interaction with female progressive farm women

42. KVK Amreli

Farming Scenario: In Amreli district in last three years there emerged the problem of pink bollworm in cotton. This pest reduced the yield of cotton by damaged boll. KVKAmreli has started campaign for the control of pink bollworm by various extension activities like training programmes, diagnostic services, lectures, telephonic guidance, Whats App messages, distribution of pamphlets etc. More than 62 villages ofAmreli districts have been covered.

Areas of work: Value addition, water management through drip-irrigation, water harvesting, soil-testing and management, management of worm.

Achievements: It provides bio control product to farmers such as Beauveria bassiana, pheromane trap on the basis of no profit no loss.

Challenges: In Amreli district farmers are facing problems of saline water, shortage of irrigation water and damage of crops by wild animals.

Farming through drip-irrigation

Water harvesting model at KVK

43. KVK Rajkot

Farming Scenario: In Rajkot, major intercropping systems followed are: groundnut + castor (3:1) groundnut + pigeon pea (3:1), groundnut + sesamum (6:3), pearl millet + pigeon pea (2:1), sorghum + pigeon pea(1:1) and cotton + green gram /black gram/groundnut in paired row system. Around 38% farmers have land holding up to 1 ha (marginal farmer), where as 32% farmers are having land holding of the size 1 to 2 ha. (small farmer), 18% farmers possess 2- 4 ha. Land (medium holding) and, only 12% farmers have land holding of the size of more than 4 ha land (large holding).

Activities: Worm management, enhancement of nutritive value of low grade fodder, management of stem rot disease, composting of cotton stalks chopped by stalk shredder, maintenance of soil health through incorporation of crop residues into soil by rotavator, adoption of micro irrigation system for water saving.

Challenges: The socio–economic constraints are related to prevailing production condition in the district, poor resources (economic conditions), low level of literacy, high cost of inputs, lack of awareness regarding available technology. Difficulty in marketing the crops, getting support prices, non-availability of timely credit facility at reasonable interest rates, non availability of required inputs at farmers level, non-availability of laborers during peak times, high wage rates, small and fragmented holdings stand in the way of extending the area for more remunerative crops in the district.

Recent Achievement: KVK, Rajkot has been conducting FLDs on cultivation of summer sesame var. GT-3 since 2006. The summer sesame crop has been accepted by the farmers of the area as a cash crop in cotton-wheat rotation.. It provides additional income to farmers. Owing to these benefits, the summer sesame acreage in the district is increasing. The cotton growing farmers of the area are adopting summer sesame as a third crop and the fields are utilized, otherwise left vacant after wheat harvesting and before cotton sowing.

Value-addition in sugarcane

Decomposition of cotton stalk

44. KVK Bharuch

Brief History: The Krishi Vigyan Kendra (KVK) is a district level Farm Science Centre sponsored by the Indian Council of Agricultural Research (ICAR), New Delhi. The KVK for Bharuch district is established at Chaswad village of Netrang taluka in the year 1994. The KVK-Chaswad implemented by well known NGO BAIF Development Research Foundation.

District Profile vis-a-vis Farming Scenario: Bharuch District is bounded by Baroda and Anand District on the North, Narmada District on the East, Surat District is on the South and on its west lies the gulf of Cambay. The Eastern strip of the district is a hilly and forest area. The district enjoys moderate climate with greater

humidity on its coastal side. The average rainfall in the district is 750 mm to 800 mm. Main rivers in Bharuch District are Narmada, Dhadhar and Kaveri.The rivers flow throughout the year. Since the ancient age the history of district has shown remarkable peculiarities.Ancient scriptures depict about Pandavas living in forest of Zagadia and Valia during their secret forest-dwelling.

Major Interventions by KVK

1. The farmers in the district have got the permanent and cheaper solution to manage the pink ballworm problem in cotton. More than 85 % of farmers have adopted this technology for management of pink ballworm in Cotton.
2. The per cent increment in yield of green gram to the extent of 10-25 % in FLDs over the farmers practice created greater awareness and motivated the other farmers to adopt the improved package of practices of green gram. The total production of the district enhanced from 618 MT to 1100 MT due to increase in area and productivity.
3. The horizontal spread of the technology have take place very rapidly during last few years due to promotional activities of KVK. The area under cultivation of BNH-10 expanded in more than 55 ha which was earlier nil indicates the acceptance of technology by farmers.

Glimpse of KVK activities

45. KVK Pune II, Narayangaon

Activities: Major focus was given on Soil Health Management. Before conducting OFT - FLD soil sampling was taken by KVK scientist. As per soil analysis report fertilizer management was done. Major emphasis was given on integrated fertilizer management including green manuring, organic manuring, granular fertilizer and water soluble application. In all interventions integrated pest and disease management was followed.

This KVK Pune-II has organized farmer / Rural Youth training on protected cultivation of high value vegetables every year. Out of total 256 participants 56 participants have started their own enterprises by constructing Greenhouses and started cultivation of Colour Capsicum,Tomato and Cucumber. In last five years four commercial vegetable and flower seedling nurseries were established after taking training in KVK.

Achievement: KVK assessed the problems faced by the tribal farmers in paddy cultivation in western region of Pune district in KVK jurisdiction. Due to heavy rainfall fertilizers are wasted. KVK made intervention of use of Urea + DAP Briquette in Khamgaon Village which is nearby Junnar Tahsil with the help of Line dept. (ATMA). Using urea briquette fertilizer the farmers have been able to increase yield than that by application of traditional method.

Using urea briquette fertilizer the farmers have been able to increase yield than that by application of traditional method.

This KVK conducted the frontline demonstration during 2014-15 on four fold rice cultivation technique with improved variety Phule Samruddhi. In this technique the required seed rate is less (40 kg/ha) which reduces the cost of seed.

Highlights of the KVKs' mandated activities

46. Mahatma Gandhi Mission (MGM) KVK Gandheli, Aurangabad II

MGM KVK Gandheli, Aurangabad is located in the outskirts of Aurangabad in a dry and hill-rock area. It has been a sincere effort to convert the arid hill-rock region into a fertile and cultivable landscape. The management of KVK has succeeded in converting useless barren land into a cultivable pasture. The KVK although a NGO-managed organization, it is ingeniously working in synergy with external and internal organizations such as government sector agencies and three institutions of its own on campus viz. biotechnology, food technology and agriculture institutions. This KVK has dedicated 53 acres of own land for farm activities.

The KVK has created separately segmented units for goatry, cows, multiple varieties of poultry units, horticulture, sericulture, vermi compost production unit, nursery raising units, apiculture, dry land fruit crops and fodder crops

Demonstration Unit

FGD with faculty and progressive farmers

The KVK has constructed two farm water ponds with the capacity of 1,00,000 gallons each for the purpose of irrigation. All area is covered under drip and sprinkle irrigation system.

The KVK is performing the mandatory activities in a systematic and time bound manner. However, it has the potential to be upgraded by strengthening Integrated Farming System (IFS) Model at KVK instructional farm.

The KVK desparately feels the need for skill training and funding. It is also planning to initiate programmes to impart vocational skills to rural youth in those adopted villages. There is a need to increase the revolving funds for seed and seedling multiplication activities and also for farm development and vocational training. While the KVK has the capacity to introduce new technology and maintain additional demo units, the officials opine that external funding is their immediate need. A general feel of farmers is that the training for women farmers conducted by the KVK has been very helpful for developing the agro-entrepreneurship amongst farm women.

47. KVK Gondia

District Profile vis-a-vis Farming Scenario: Gondia district stretches over an area of 5641 sq. km. In terms of area, Gondia district constitutes 1.83% of the total area of the Maharashtra State. Total population of the district according to 2001 census was 12,00,707 out of which 5,98,834 were males and 6,01,873 were females. Of the total population, 88% is residing in rural area and 12 % is residing in urban area. The density of the population according to the 2001 census was 213 persons/sq. km.

Major Interventions by KVK: A good infrastructure meant for on farm veterinary activity is readily available. Activities on the farmer's fields are going well with the help of the SMSs intervention, though in a fragmented manner, there is a scope for further improvement of the levels of activities. The SMSs working with KVK Gondia are specialized in animal husbandry and dairy science, home science, agriculture engineering, entomologist. All the SMSs are under probation, barely completed one and a half year, and they need to be given full guidance and training.

A remarkable achievement or highlight of the KVK Gondia activities is that thay have organized state level agro exhibition AGROTEC in 2009 and have implemented lac cultivation training programme in 8 talukas covering 234 villages. It was learnt that 8000 tribal farmers were trained in lac-cultivation techniques at the cost of Rs 4000/- each per trainee in the past years.

Interaction with the stakeholders

48. KVK Chitoor I

Brief History: KVK is established in 1992 under a Non Governmental Organization set up. KVK deserved to be in the top rank category. This KVK is well connected with surrounding area.

District Profile vis-a-vis Farming Scenario: Chittoor district is a part of Rayalaseema and lies in the extreme south of Andhra Pradesh. There are no perennial rivers in the district. Pilgrim centres, Tirupati, Kalahasti are in the district. It is covered with red loamy soil 57%, red sandy 34% and remaining black soil. The summer temperature touches 46 degrees and winter temperature ranges from 12- 18 degrees Celsius Normal rain fall is 918 mms.

Major Interventions by KVK: Work pressure from the all the corners – Apart from the mandated activities

i) Diluted activities – District Administration is insisting more on non-mandated activities

ii) Farming community for extension services of the KVK

iii) Maintenance cost is required to repair the physical infrastructure which was established almost 25 years ago.

iv) Additional financial support to buy latest farms equipments / tools and development of some more demonstration units is needed. At least additional 25 per cent increase in the budget for technical works is required to cover more farmers.

v) Some more scientists in the field of Veterinary, Soil Science, Metrological Field is required to serve the farmers.

vi) Soil Testing Lab with the latest equipments and technicians is also one of the basic requirements at the KVK. There should be periodic training facilities to the technicians at KVK.

vii) A mobile van for helping the farmers especially for Tissue Culture Farmers is one of the main demands of the KVK Chittoor I.

viii) Staffs' career promotions options and other benefits are not available to the KVK staff.

ix) Seed Procurement of the State Government may be fixed with KVK as the KVK is the only producer of high quality seeds of various crops.

x) KVK can be asked to produce Nutritious Food Mix for the Anganwadi Children.

Recent Activities: First, the KVK has focused to reduce the cost for farming which includes reduction in use of Chemical Fertilizers, Pesticides – use of more bio fertilizers etc. Secondly, systematic farming/cultivation – led to better yield. Thirdly, seasonal advice has helped to get better price and better cropping. Similarly, the KVK has introduced multiple crops, introduction of commercial crops with short duration etc. for enhancement of the income of the farmers. Completely Organic means of cultivation is one the very significant initiatives taken by the KVK which has given high quality yield and price for the produce. The KVK is emphasizing farmers to move towards Integrated Farming System - which can help the farmers to get the flow of money throughout the year. Sericulture, Horticulture, Mushroom and Entrepreneurial Development are some of the other areas for which KVK has taken series of efforts to enhance farmers income.

Glimpse of the KVK

Brief History: Since its commencement the KVK is functioning in rented buildings. The State Government had allotted sizable land to KVK but it is difficult to convert it into usable lands due to its location.Vast majority of the land is under rock. Some part of the land is already converted into few demonstration units incurred with huge expenditure. But the place of the land is suitable to famers for easy access.

District Profile vis-a-vis Farming Scenario: Chittoor district is situated between 12^0 37" to 14^0 8" North Latitude and 78^0 33" to 79^0 55" East Longitude. The district is categorized under southern agro climatic zone of Andhra Pradesh based on soil type, rainfall and altitude. Groundnut cropping system occupies maximum area of the zone followed by Rice. In dry farming tract of the zone, mono cropping of the Groundnut is the main stay whereas under canals, tanks, wells and bore wells, double cropping is practiced.

Major Interventions by KVK: The KVK has taken initiatives to train the farmers on processing, value addition and horticulture crops. The effect of these kinds of demonstrative activities is visible. Some farmers cum entrepreneurs have been trained in the locality. Due to lack of infrastructure the KVK is positioned at the lower side of the category, however, it deserves to be in better position for their performance. The KVK is moving towards better success even with lack of infrastructure.

Development of Entrepreneurship is one of the most successful initiatives of the KVK. Within the period of five years KVK has produced 35 entrepreneurs in the locality.

Even females were developed as entrepreneurs. The KVK is assisting the entrepreneurs to get registered and apply for certificates for the value added products. It has developed more than 10 active farmers as Seed Supplier - producing high quality seeds and selling to other farmers in the region and to other districts. The centre has created Farmers Federation - a farmers organization for saving and lending purposes - which is most successful among the farmers in the region.

An interaction with women entrepreneurs

50. KVK Guntur

Background of KVK, Guntur (Andhra Pradesh): Established in February, 2012, at LAM Farm in 60 acres of fertile land, Guntur, under the administrative control of Sri Venkateshwara Veterinary University, Tirupati.

Recent Initiatives & Innovative Practices:

Following initiatives were successfully carried out by utilizing the local resources;

1. Construction of fish pond in the KVK campus. This is going to yield good income to KVK as there is huge demand for fish in the Guntur city, adjoining the KVK farm.
2. Established poultry farm, cattle shed.
3. Crop cafeteria with all demonstration units.
4. Vocational training designed to provide sustainable income to women, SHG members in the area of dairy & poultry farming, vermi composting, mushroom cultivation and candle making etc.
5. Training programs for integrated crop management
6. Awareness programs for optimal use of fertilizers and pesticides and to adopt the methods of organic farming.

Recent contributions of KVK to enhance productivity and entrepreneurship in the district:

1. Diagnostic visits to farmers fields by SMSs
2. Seed production activity
3. Organising farmers melas and interaction with progressive farmers
4. Farmers visits to fields for successful demonstration
5. Display of several demonstration units at KVK farms

Women Entrepreneurs

Seed production and demonstration Unit

51. KVK Karaikal

The region receives considerably sufficient water from Cauvery Delta irrigation system. It is also gifted with natural fertile lands. The river water Canal system together with bore wells lead to successful agriculture activity of Karaikkal region. The KVK Karaikal is located in the most fertile part of Karaikal called Madhur. Hence irrigation facilities and the fertile lands are the natural strength of the KVK Karaikal.

While taking visit around the farm land it was noticed that variety of activities are being carried out and the important ones are horticulture, fisheries and paddy crops. As part of the fisheries programme, fingerlings are being nurtured on regular basis and numbers of fish farmers buy the fingerlings at subsidized rate from the KVK Karaikal. It seems that farmers from all social category viz. SCs STs and OBCs besides others receive the subsidy benefits. Crop intensification technology is being practiced and popularized by KVK Karaikal by using paddy nursery tray, which was found to be more beneficial to the farmers. There are several farm labourers mostly unskilled male workers who are working in the paddy fields and in the farm houses.

There is a warehouse and shed for farm equipments in the campus. However, there is no vehicle facility available except for an age old ambassador car being parked aside the building. The KVK Karaikal campus is well secured with boundary walls along the road side and a beautiful arch is there at the entrance guarded by security men. There are no evidences of training programs conducted for farmers of late, and there is no provision of hostel facilities for the farmers .

Demonstration Units

It has been learnt that several farmers have benefited from the KVK Karaikal, which is also evident during the visit to farmers' field. It seems that KVK Karaikal has been instrumental in spreading mushroom cultivation technique in this region.

The numbers of posts meant for SMSs remain vacant except two SMSs with specialization on fisheries and home science. As the post of Programme Coordinator (PC) remain vacant for long time, a Deputy Director level officer with Agriculture department, who previously worked as SMS in the KVK Karaikal, looks after the additional charge of PC as well. He also expresses the inconvenience and difficulties in managing the department activities with that of the regular works in the KVK Karaikkal.. There are almost no administrative initiatives to fill up the vacancies especially post of a permanent coordinator and SMSs on part of the government.

This KVK will be able to perform its activities in a sustained manner only when there is adequate manpower and specifically when some regular PC is appointed.

52. KVK Nagapattinam

Brief History: The dependency of the farmers on KVKs are much high and they expect more constructive inputs from KVK. Nevertheless, during interaction, few farmers have expressed concern about the likelihood plan of transferring the administrative control of KVK to state fisheries department with the thrust area of its operation mainly focusing on fisheries. All the farmers wanted the KVK Nagapattinam should continue with the TNAU (Tamilnadu Agriculture University) only. Even with such instabilities KVK Nagapattinam carries out its routine activity.

District Profile vis-a-vis Farming Scenario: Nagapattinam is a coastal district of Tamil Nadu. The KVK is situated on the eastern side of Nagapattinam. The district headquarter lie 326 km south of the State capital, Chennai, 145 km from Trichy. This district lies south of Cuddalore district and another part of the Nagapattinam district lies to the south of Karaikkal and Tiruvarur districts. The district spreads over an area of 2,715.83 sq.km

Major Interventions by KVK: The Programme Coordinator designed a plan to promote a total mechanization of agriculture activities as a final resort in order to thwart the delayed agriculture activities due to acute labour problem. It seems that few farmers who have had training at KVK Nagapattniam realized the critical needs of complete mechanization, have changed their mind set from conventional farming to mechanization. Some observation about KVK, Nagapattinam are that on campus activities suffers due to lack of field staff and permanent skilled labour for doing mandatory activities of KVK.

Though lack of SMS on fisheries and animal husbandry are being highlighted as the major issue, at the time of visit to KVK Nagapattinam, only two SMS (home science and entomologist) were present and it seems that all other SMSs were transferred to university or elsewhere six months ago. The visiting team has learnt that as part of agricultural extension activities KVK Nagapattinam, intervenes in farm mechanization including OFT (on farm trials), OCD (on campus demonstration) to farmers, FLD (front line demonstrations) in farmer's field, FFS (farmers field schools) and trainings in farmer's field to familiarize the farm mechanization in rice cultivation. It seems that efforts have begun at KVK Nagapattinam level to bring in influential farmers as para-extension workers, who can be instrumental in disseminating the mechanization of rice cultivation to their fellow farmers.

Glimpse of KVK Activities, Nagapattinam

53. KVK Rangareddy

The KVK Rangareddy is one of few oldest KVKs in the country established in 1976 -77. The KVK is functioning under Central Research Institute for Dryland Agriculture, an ICAR institute. The KVK is fully equipped with required infrastructure and resources. Since the KVK is functioning under the ICAR institution, KVK is getting full support and assistance for the betterment of the farming communities in the area.

KVK is specialized with the availability of more machineries and equipment relates to farming. In addition, due to locational advantage the KVK is also getting popular from the non-farm communities. Especially, the Kitchen Garden guidance of the KVK is getting much popular among the residents in the locality.

Few Highlights of the KVK

- Popularizing the FLORICLUTURE and KICTCHEN GARDEN are the two top most recent initiatives taken by KVK which is getting more attention from the farming community and society in general.
- Development of Entrepreneurs under the KVK guidance is another significant improvement of the KVK- The survey team has interacted such farmers cum entrepreneurs which visiting the KVK.
- KVK is slightly in better position in supply of machineries and equipments for the hire farmers in the locality. Team has seen the availability of machineries and equipments at KVK.
- KVK has taken Reducing the input cost is the top most priority to enhance the income of the farmers. KVK is doing all he required assistance towards the reduction of the inputs cost of the farmers.
- Insisting use of bio-fertilizers and Pesticides
- Advising less use of Chemical Fertilizers
- Systematic planning of cops – which can reduce the labour cost and get high yield.
- Highlighting additional income from floriculture and Dairy activities

- Seasonal advice before every season for crops which can get better yield and income.
- Insisting farmers for integrated farming system – widely accepted

Flower variety Popularised by the KVK

Few Machineries and Farm Equipments at KVKs

54. KVK Warangal II

The KVK is established recently but seems their performance is remarkable within this short duration of time. Still developing the infrastructure the SAU is rendering full support to the KVK team for the necessary assistance in addition to ICAR grants. The team at KVK is young and more energetic to deliver the services. It was found that the presence of the KVK has made significant changes in their farming system and yield in the area.

Availability of labour is the only problem which is highlighted by the many farmers during the discussion. Farmers are of the opinion that their income is slowly increasing during recent past onwards. Input and other cost of farming has become almost half as compared with prior to KVK's advice. Yield has been increased more than 25 per cent compared to the pre-era of the KVK. Moving along with line departments for the purpose which can again strengthen the farmer's hand.

Trying to get marketing assistance to the farmers and providing price situation to farmers is another move towards doubling the farmer's income. Identifying the active farmers and converting them to Integrated Farming System is another initiative to enhance the farmer's income and flow of income through the year – which in turn attracted many farmers through farmers – farmer's model.

Farmers are opting traditional cultivation of Cotton which again by large number of farmers was one of the challenges to KVK to shift them to alternative crops. Initially farmers are hesitative to adopt the change of crop due the irrigation problem of the area. But slowly by looking at the active farmers, large number farmers slowly adopted the KVKs strategy to change of crops from cotton to pulses. Economic use of available water and less use of chemical fertilizers, systematic use of water through trip irrigation are some of the factors which guided the farmers to move from traditional cultivation method.

Highlights

- A Pilot OFT has undertaken for Adolescent Girls to increase Blood late and Hemoglobin. It was highly successful and it has been accepted and adopted the State Government.

- Popularizing the Intercropping system is another successful demonstration of the KVK which is widely adopted by the farmers in the area.
- Getting the farmers problem through Whatsapp Images and rendering solution immediately to farmers is another successful initiative taken by the SMS team at KVK which also largely welcomed by the farmers.
- KVK has introduced Cluster FLD Approach to outreach more farmers which in turn more success in the cropping pattern. More than 20 per cent of the area under Cotton has been diverted to Pulses (Red Gram) which gave very good yield and high price to the farmers.
- Almost 240 Hectares of the land under Cotton has been shifted to pulses in the district which is one of the most successful initiatives taken by the KVK which is highly appreciated by the district administration – This is one of the most significant moves towards doubling the farmer's income.
- Approach through Farmers Club and Self Help Groups is another movement of the KVK to reach more farmers.

Teams interaction with KVK and visiting the Farm

55. KVK Ramanagara

Specific issues relating to the KVK: Availability of labour is a major constraint. In addition to this, inadequate power supply comes in the way of irrigating the crops and increasing the yield to the desired level.

Activities: KVK is demonstrating various technologies like introduction of improved varieties (Ragi- GPU-48, 66, 67, ML-365, KMR-301, 204, 340 & MR-6 Redgram – BRG-5, Field Bean – HA-4, Groundnut – GKVK-5, Castor – DCH-177, Fodder Crops – C0- 3, 4 & 5, DHN-6 & COFS-29, Drumstick – Bhagya etc.), Integrated pest and Disease Management, Integrated nutrient management, mechanization & processing and value addition. KVK is undertaking entrepreneurship development activities that can double the income of the farmers.

Achievements: KVK is producing and up-scaling drumstick in the district. Due to several educational activities, there is considerable increase in area (79 ha) under drumstick in the area

This KVK is conducting an innovative activity in mango concentrating on safe ripening and direct marketing. The KVK has introduced various high yielding fodder crops to the farmers through capacity building programme, field

days and farmers participatory fodder seed production. KVK introduced a modified handy implement viz., Cycle Weeder, which helps in carrying out timely weeding & intercultural operations in field and horticultural crops, thus reducing labour dependency and drudgery.

Major Contribution: Mango and Banana special units were established utilizing revolving fund. Shade nets established during 2013 were repaired utilizing revolving fund. UPS for office use was purchased utilizing revolving fund.

Discussion with entrepreneurs

Observing display materials

56. KVK Bidar

Profile of the District: Krishi Vigyan Kendra, Bidar was established during 1985 and is located in the North Eastern Transitional Zone (NETZ), which is smallest of the agro-climatic zones of Karnataka state with a geographical area of 8.71 lakh ha, of which only 5.86 lakh ha is under cultivation. This zone receives a fairly well distributed rainfall of about 870 mm from June to October. This distribution facilitates taking up of two crops (i.e. Kharif and rabi) in certain parts of the zone.

Services Provided by KVK:

1. Organising vocational training programs in agriculture & allied enterprise
2. FLDs on major Oil seeds, Pulses, Cereals, and other horticultural crops
3. In-service training for the field level extension functionaries
4. OFTs on major problems of crops

Infrastructural facilities available at KVK Farmland

1. Demo units of all new technologies
2. Information kits of audio, video casettes, and printed booklets on farm fields, and demonstration on emerging technologies in the field of Horticulture, Home Science, Seri-culture
3. State of the art lab facilities for soil, water, and plant samples testing
4. Hostel facility for 50 farmers

KVK Bidar has groomed many progressive farmers and one of them was recognized at national level and recently was honored as the best farmer of India by Mr. Narendra Modi, Hon'ble Prime Minister. Details of photos (1). Sugarcare nursery of a progressive farmer, (2) Innovative design of a hand-operated tractor by converting a used 50-cc motorcycle by a progressive farmer.

57. KVK Alappuzha

Alappuzha – 'The Venice of the East' – is blessed with the scenic beauty of its back waters, sea shores, religious, historical and cultural land marks like Krishnapuram palace, Edathua St. George Church, Sri Krishna Temple at Ambalappuzha and snake boat race. It is a typical coastal district of Kerala with 82 km long coastal belt. Major part of 'Kuttanad' which is popularly known as 'Rice Bowl of Kerala' and situated below mean sea level, is in this district. Alappuzha is distinct with the presence of agricultural problem areas such as the Kuttanad (Kari, Karappadam, Kayal lands), Onattukara (sandy areas) and a part of pokkali lands with a span of crops ranging from paddy to rubber and a variety of enterprises like coir, marine, brackish water and fresh water fisheries, and processing.

KVK, Alappuzha hosted by Central Plantation Crops Research Institute (Regional Station), Kayamkulam started functioning from June 2000 under the National Agricultural Technology Project (NATP) of ICAR, it was remandated to the regular KVK status from April 2004. Located along the NH-47 at Krishnapuram, it can be easily accessed by the farmers from different parts of the district.

Participatory Rural Appraisal (PRA)s are conducted to identify the problems faced by the farmers and based on the priority of the problems, OFTs are implemented. FLDs conducted include paddy varieties, vegetable varieties, vermi composting, spice crops, azolla, apiculture, organic pest management practices, mushroom cultivation, local fruit processing, soil and nutrient management etc. The dedicated Help Line services that answers farmer query through phones and mails and direct diagnostic and advisory services through agri-clinics are of great help to the farmers.

Though coconut is the main crop, with the initiative of the KVK integrated farming is being given high priority. The KVK has promoted cage culture of pearl spot fish in the rural areas. The Kendra has also popularised orchard for grafting, low cost vermin wash and vermin compost units at various locations at rural areas.

With Scientists and progressive farmers

Integrated Farming System Model for Alleppy

58. KVK Ernakulam

The district is located in central Kerala. Ernakulam includes the largest metropolitan region of the state Greater Cochin and the third most populous district in Kerala. It is the highest revenue yielding district in the state and is known as the commercial capital of Kerala. The district has a total geographical area of 3,068 km^2 with high lands, midlands and coastal areas. There are seven taluks in the district. River Periyar, which is the second longest river in the state, runs across the district. The district is benefited by both Muvattupuzha river and periyar valley irrigation projects. The soil is predominantly laterite and alluvial with presence of china clay and graphite, enriched with mineral deposits in some pockets. Agriculture contributes significantly to the District economy. The eastern part of the district is primarily agrarian in nature and farther eastern part has dense forests with its characteristic fauna and flora.

KVK is located to very near to sea and there is a proposal to re-locate the KVK to some other place. Since the state has nearly 100 per cent literacy, the farmers are well aware about the role to be played by the KVK.

The KVK has the locational disadvantage as it is close to sea, but the scientists are undertaking demonstration at the farmers field. Pokkali fields are very common in the district that is two crops in one farm.

Cage Farming

Location of KVK Ernakulam close to Sea

The KVK with the help of NABARD has done marketing intervention for the farmer's products to avoid middle man. The KVK has well coordination with the line department of the district as a result cage culture (fish production) and Pokkali with the financial assistance from the government could be made possible in the district. Seed demand is very high in the district and KVK has tried its level best to meet the demand. The KVK has its marketing sale counter and various value added item are being sold and generating substantial revenue to enhance the revolving fund.