

# EXECUTIVE SUMMARY

## INTRODUCTION

**Zonal Coordinating Unit VIII** was established in September 1979 at Tamil Nadu Agricultural University, Coimbatore to monitor the activities of **Lab to Land Programme**. Subsequently, the unit was transferred to Bangalore in September 1981. Since 1986, this unit was given the additional responsibility to monitor all the ICAR Projects under the Division of Agricultural Extension located in this zone comprising of Karnataka, Kerala, Tamil Nadu, Goa, Pondicherry and Lakshadweep

## KRISHI VIGYAN KENDRAS OF THE ZONE

At present the Zonal Coordinating Unit monitors activities of 74 KVKs in four states namely Karnataka, Kerala, Tamil Nadu and Goa and two Union Territories namely Pondicherry and Lakshadweep. During the year one KVK has been established in the district of Dharmapuri in Tamil Nadu.

### State wise Status of Krishi Vigyan Kendras

| Name of the State | No. of Districts | Details of KVK |           |           |           | TOTAL     |
|-------------------|------------------|----------------|-----------|-----------|-----------|-----------|
|                   |                  | SAU            | NGO       | ICAR      | Others    |           |
| Karnataka         | 27               | 21             | 04        | 01        | -         | 26        |
| Kerala            | 14               | 07             | 03        | 04        | -         | 14        |
| Tamil Nadu        | 30               | 17             | 10        | -         | * 02      | 29        |
| Pondicherry       | 04               | -              | -         | -         | **02      | 02        |
| Goa               | 02               | -              | -         | 01        | ** 01     | 02        |
| Lakshadweep       | 01               | -              | -         | -         | ** 01     | 01        |
| <b>TOTAL</b>      | <b>78</b>        | <b>45</b>      | <b>17</b> | <b>06</b> | <b>06</b> | <b>74</b> |

ICAR – Indian Council of Agricultural Research  
 SAU – State Agricultural University  
 NGO – Non-Governmental Organization  
 \* Deemed University  
 \*\* State Department of Agriculture

## STAFF POSITION

Total number of sanctioned posts in the 74 KVKs of Zone is 1184 out of which 966 (82%) are in position. Highest number of vacancies is in Programme Assistant category (34%). Total number of sanctioned post in each KVK is 16.

## ACTIVITIES OF KVK

KVKs plan their activities based on the current problems in the major crops/enterprises of the operational area. Normally, a group/block of villages are covered in each taluk of the district by working intensively on the prioritized problems treated as thrust areas for KVKs. Problem identification and prioritization of thrust areas is the fundamental activity of KVKs. Following are the thrust areas on which the KVKs of Zone VIII performed their interventions namely skill training of farmers, vocational training to rural youth, in-service training of extension personnel, organizing frontline demonstrations to establish production potentials on farmers' fields and provide feedback, on-farm testing, organizing extension activities, production and supply of quality seed and plant materials and analysis of soil, water and plant samples.

- ⇒ Sustainable crop production through integrated nutrient management and organic farming strategies
- ⇒ Integrated Pests and Disease management
- ⇒ Scientific management of dairy and small livestock with appropriate feeding, breeding and health management practices

- ⇒ Introduction and popularization of improved varieties/hybrids of crops through technical and material back-up
- ⇒ Development and promotion of crop diversification and alternate land use systems
- ⇒ Empowerment of women and youth through improved nutrition, health, income and reduction of drudgery
- ⇒ Promotion of horticulture as a mechanism of crop diversification, augmenting family income and national income through export
- ⇒ Natural resource management for sustaining resource productivity
- ⇒ Value addition, processing and market facilitation of household and commercial enterprises
- ⇒ Soil, water conservation and watershed management for drought proofing and sustainable rainfed farming
- ⇒ Capacity building of rural youth and women to establish self-employment units
- ⇒ Small scale mechanization for saving time and reducing cost and drudgery
- ⇒ Popularization of crop production technologies and integrated farm development strategies
- ⇒ Capacity building of farmers through information access, exchange and forecasting mechanisms
- ⇒ Increasing income from fishery enterprises through production, processing and marketing enhancing activities

## **TECHNOLOGY ASSESSMENT AND REFINEMENT**

KVKs in Zone VIII took up 3016 On Farm Trials (OFT) to assess 313 technologies and refined 36 technologies related to crop enterprises on various aspects of including drudgery reduction (20), farm machineries (59), Integrated Crop Management (623), Integrated Disease Management (310), Integrated Nutrient Management (688), Integrated Pest Management (505), Resource Conservation Technology (413), Seed Production (9), Storage Technique (51) and Value Addition (52). Apart from the above KVKs also took up 284 On-Farm Trials (OFT) to assess 25 technologies and refined 4 technologies related to animal enterprises on various aspects of including disease management (97), evaluation of breeds (3), feed and fodder management (5), nutrition management (58) and Production and Management (118).

## **FRONTLINE DEMONSTRATIONS**

The Frontline Demonstrations (FLDs) were conducted to demonstrate the production potential of the newly released production technologies in a given farming system. Training programmes and field days were organised for extension workers and farmers in the demonstration plots for dissemination of technologies.

During the year, **9689** frontline demonstrations were organized including **5548** on oilseeds, pulses, and cotton covering an area of **4022.2** ha; besides **1000** demonstrations on various enterprises.

**Oilseeds:** During the year, 1954 demonstrations were conducted covering 912.8 hectare area on major oilseed crops viz., Groundnut, Sesamum, Soybean, Castor, and Sunflower. The percentage increase in yield varied from 21.89 in groundnut to 48.16 in castor.

**Pulses:** Demonstrations were conducted in Bengalgram, Redgram, Greengram, Blackgram, and Horsegram. A total of 812 hectare area was covered with 1825 farmers. The percentage increase in yield varied from 16.45 in blackgram to 43.15 in redgram.

**Cotton:** A total of 1769 demonstrations were conducted in cotton covering an area of 894.8 ha. The percentage increase in yield varied from 12.7 in hybrid NCS-145 Bt to 72.94 in Suvin.

**Cereals and Horticultural crops:** The KVKs conducted frontline demonstrations on cereals, fodder, commercial and horticultural crops covering an area of 1402.06 ha benefiting 4141 farmers.

\* No.of nuts/ha

**Enterprises:** Frontline demonstrations on enterprises like agricultural implements, livestock and mushroom were conducted by KVKs.

**(a) Farm implements:** Forty five KVKs conducted demonstrations on agricultural implements like cooking devices, behndi plucker, cono weeder, decorticator, improved sickle, saral krupi,

rotavator, stripper, wheel hoe, pneumatic planter etc. A total of 358 farmers were involved in these demonstrations.

**b) Livestock Enterprises:** Fifty two KVKs conducted demonstrations on livestock enterprises with technologies like breed popularization, nutrition management, disease management, Artificial Insemination etc. Specific technologies include mineral mixture supplements, de-worming, optimum feeding and de-worming in goats, backyard poultry, quail rearing, etc. A total of 610 farmers were involved in these enterprises.

**(c) Other Enterprises:** Enterprises on fisheries and sericulture were promoted through SHGs in Karnataka And Tamil Nadu states. A total of 32 farmers were involved in these enterprises.

## **TRAINING**

During the year, 9131 training programmes were organized with the participation of 268760 farmers including rural youth, and in-service extension personnel. Besides KVKs of the state conducted 2369 sponsored training programmes which benefited 87424 participants. The above training includes 280 vocational training programmes for 5690 youths on various vocations.

**Farmers' Training:** A total of 7178 training programmes were organized for the benefit of 218614 farmers and farmwomen on various technologies related to orchard management, production and value addition of ornamental, plantation, tuber, spices, medicinal and aromatic, and agro-forestry plants, plant protection, soil health and fertility management, livestock production and management, household nutritional security, economic empowerment of women, drudgery reduction of women, methods of protective cultivation, farm machinery, tools and implements, processing and value addition, fisheries, production of inputs at site, and capacity building and group dynamics. Discipline-wise analysis of these programmes gives the following details:

Under crop production 1502 programmes were conducted in which 51377 farmers benefited. A total of 11026 SC/ST participants attended these programmes, Under horticulture a total of 1250 programmes benefiting 35943 farmers which includes 7164 SC/ST participants were conducted. Technologies related to vegetable crops, fruit crops, ornamental crops, plantation crops, tuber crops, spice crops and medicinal & aromatic plants were advocated in these programmes, 497 programmes benefiting 17554 farmers were conducted on soil health and fertility management, Technologies related to livestock production and management were imparted in 620 programmes to 17910 farmers, Various aspects related to home science/women empowerment were imparted to 26793 participants through 1187 programmes, 337 programmes benefiting 8218 farmers were conducted on various technologies related to agricultural engineering Plant protection related aspects were imparted through 775 programmes to 24242 participants which includes 5592 SC/ST 3585 participants were benefited in 175 programmes related to fisheries Technologies related to production of inputs at site were imparted to 21777 farmers in 446 training programmes Capacity building and group dynamics related aspects were imparted in 252 programmes and a total of 6515 farmers were benefited 4700 farmers benefited in 137 programmes in various areas of agro-forestry

**Training for Rural Youths:** The training programmes for rural youth were organized for imparting skill oriented trainings on increasing production and productivity of crops, orchard management, production and value addition of fruit plants, livestock production and management, economic empowerment of women, methods of protective cultivation, farm machinery, tools and implements, processing and value addition, fisheries, production of inputs at site, and capacity building and group dynamics. As many as 1348 skill oriented training programmes were organized for 32823 rural youth.

**Training Programmes for Extension Personnel:** A total of 605 training programmes were conducted covering 17293 participants. These training programmes were organized for extension functionaries working in government and non-governmental organizations related directly or indirectly with the development of agriculture. The training was imparted to upgrade their knowledge and skills in frontier areas of agriculture technologies related to increasing production and productivity of crops, plant protection, soil health and fertility management, livestock production and management, farm machinery tools and implements, economic empowerment of women, capacity building and group dynamics and house hold nutrition security.

**Training Programmes (Sponsored):** Out of a total 9131 training programmes (268730 participants) conducted by the KVKs for the farmers and farm women, rural youth, and in-service extension personnel; 2369 training programmes were conducted on sponsorship by various organizations covering 87424 participants. The

participants were from various government and non-governmental organizations associated directly or indirectly with the development of agriculture. The training was imparted to upgrade their knowledge and skills including increasing production and productivity of crops, commercial production of vegetables, production and value addition of fruit plants, ornamental plants and spices crops, soil health and fertility management, processing and value addition, methods of protective cultivation production of inputs at site, farm machinery, tools and implements, livestock production and management, fisheries, household nutritional security, economic empowerment of women, drudgery reduction of women, and capacity building and group dynamics.

**Vocational Training Programmes :** Out of 1348 training programmes conducted for rural youth, 280 programmes were specifically conducted for 5690 persons, on various vocations including agricultural para-workers and para-vet training, capacity building and group dynamics, commercial floriculture, commercial fruit production, commercial vegetable production, composite fish culture, dairy farming, income generation activities, integrated crop management, mushroom cultivation, nursery, grafting etc., organic farming, piggery, poultry farming, production of bio-agents, bio-pesticides, bio-fertilizers etc., repair and maintenance of farm machinery and implements, rural crafts, seed production, sericulture, sheep and goat rearing, value addition, vermicomposting, tailoring, stitching, embroidery, dyeing etc.

### **Extension activities**

KVKs of Zone VIII organized 53367 extension programmes covering 2681965 farmers and others to create awareness about improved agricultural technologies. The activities include advisory services, agriculture camps, animal health camp, celebration of important days, diagnostic visits, exhibition, exposure visits, extension literature, ex-trainees sammelan, farm science club conveners meet, farmers seminar, farmers visit to KVK, field day, field visits, film show, group meetings, kisan gosthies, kisan mela, lectures, mahila mandal conveners meetings, method demonstrations, scientists visit to farmers field, self help group conveners meetings, soil test campaigns, workshops, newspaper coverage, popular articles, radio talks and TV coverage.

### **Production and supply of quality seed , planting material, livestock and bio products**

KVKs of Zone VIII produced and provided 7069.84 qtl. of seed material (cereals 4755.32 qtl., oilseeds 487.84 qtl., pulses 1550.01 qtl. vegetables 30.62qtl. and others 246.05qtl.) valued at Rs. 65,08,406 and provided to 61168 farmers. Regarding planting materials KVKs supported 90714 farmers by providing 2799896 numbers of planting materials (fruits 176564, vegetables 628231, spices 1370010, forest species 157564, ornamental plants 35584, plantation crops 114828 and others 317115) with an income of Rs.90,14,348.

In the field of livestock production KVKs have provided 539224 livestock (Cattle 2936, sheep and goat 662, poultry 15263, fisheries 64812 and others 455551) to 5577 farmers with an earning of Rs.1576539. By way of production of quality bio control agents and bio fertilizers KVKs have earned an income of Rs. 4772249 by providing 40427.05 kgs of bio-agents, 142736.6 kg of bio-fertilizers AND 13326 kgs of bio- pesticide to 9661, 3321 and 12186 farmers respectively.

### **Analysis of soil, water and plant materials**

Sustainable growth in agricultural production is possible only if the soil fertility and productivity are maintained at an optimum level. In this regard, the farmers find it extremely difficult to know the proper type of fertilizer, which would match his soil. For increasing the Fertilizer Use efficiency (FUE), he must take into account the requirement of his crops and the characteristics of the soil. Soil testing programmes initiated in Krishi Vigyan Kendras (KVKs) enable the farmers to determine the level of nutrients required for various crops in different part of his field.

The basic objective of the soil, water and plant testing programme is to give farmers a service leading to better and more economic use of fertilizers and better soil management practices for increasing agricultural production. High crop yields cannot be obtained without applying sufficient fertilizers to overcome existing deficiencies.

A fertilizers recommendation from a soil testing laboratory is based on carefully conducted soil analyses and the results of up-to-date agronomic research on the crop, and it therefore is most scientific information available for fertilizing that crop in that field.

Each recommendation based on a soil test takes into account the values obtained by these accurate analysis, the research work so far conducted on the crop in the particular soil areas, and the management practices of the concerned farmer. The soil test with the resulting fertilizer recommendation is therefore the actual connecting link between agronomic research and its practical application to the farmers' fields. However, soil testing is not an end in itself. It is a means to an end. A farmer who follows only the soil test recommendations is not assured of a good crop. Good crop yields are the result of the application also of other good management practices, such as proper tillage, efficient water management, good seed, and adequate plant protection measures. Soil testing is essential and is the first step in obtaining high yields and maximum returns from the money invested in fertilizers.

In Zone VIII, out of 74 KVKs, soil, water and plant testing laboratories were established in 52 KVKs during the period 2004-05, 2005-2006, 2006-07 and 2007-08.

A total of 13626 samples of soil, 4497 samples of water, 389 samples of plant material, 203 samples of lime and 9 samples of manure were analyzed generating a revenue of Rs.9.22 lakh benefiting 13899 farmers from 5449 villages during the reporting period.

### **Rainwater harvesting unit with micro irrigation system**

In Zone VIII, out of 74 KVKs, rainwater harvesting unit with micro irrigation system were established in 15 KVKs during the period 2006-07. The state wise details are furnished below. These 15 KVKs have conducted 95 training programmes, 41 demonstrations using this unit and produced 1597 planting materials. Apart from this, 3070 farmers and 367 officials visited this unit to get acquainted with the system.

### **SCIENTIFIC ADVISORY COMMITTEE**

Out of the 74 Krishi Vigyan Kendras in the zone, 14 KVKs have conducted two scientific advisory committee meetings as per the mandate, 48 centres have conducted one meeting during the reporting period. Remaining 12 centres have been advised to convene the meeting at the earliest.

### **PUBLICATION, WEB SITE AND NEWS LETTER**

In Zone VIII, out of 74 KVKs, 36 KVKs have web sites. Out of this, 20 KVKs have their own web sites and the remaining 16 KVKs have linked sites in the web sites of their host institutes. Maximum number of web sites are available from KVKs in Tamil Nadu (16) followed by Kerala (10).

The KVKs also publish their activities and achievements in the form of News Letter. Out of 74 KVKs in the Zone, 48 KVKs are publishing their News Letters and providing the same to different clientele groups of the KVKs periodically. However the periodicity of publication widely varies among the KVKs, which can be uniformly regularized on quarterly basis.

KVKs published 177 research papers and 86 technical reports during the reporting period. Apart from this latest technologies on agriculture and allied fields were reached the farmers through technical articles (93), technical bulletins (101) and extension literature (699). Technologies related to agriculture and allied were popularized through electronic media i.e. in the form of CD/DVD (37).

### **REVOLVING FUND**

Revolving fund is in operation at 0000 centres of this zone. Among the centres KVK Wynad has generated higher amount of Rs.6.23 Lakhs. Out of Rs.21.78 lakhs sanctioned to KVKs upto IX Plan an amount of Rs.17.73 have been recovered as on 30.09.2004. Out of 31 KVKs of IX Plan 18 KVKs have refunded the seed money in full. All the centres have been suggested to utilize the amount observing business principle so as to become self-sustainable. The details in respect of the revolving fund have been below.

### **LINKAGES AND SPONSORED PROGRAMMES**

Krishi Vigyan Kendras are primarily funded by the ICAR from their Plan funds for meeting their financial expenses. Since KVKs are playing the role as Farm Science Centers at district level they are expected to have strong financial and functional linkages with other Government and Non Governmental agencies in the form of sponsored programmes. This may be a development project, research project, technology assessment and refinement project etc.

Sponsored programmes in being implemented by KVKs of Zone VIII indicates the strong and functional linkages of KVKs and 52 Government as well as Non Governmental agencies supported KVKs for

implementing sponsored programmes. The total amount of sponsored funds is Rs. 1891.50lakhs. The major sponsor includes State Department of Agriculture (Rs.524.18 lakhs), NHM, (Rs. 279.99 lakhs), Tea Board (Rs. 131.07 lakhs), Ministry of Agriculture, GOI (Rs. 126.14 lakhs), DBT (Rs. 97.25 lakhs), SHM (Rs. 89.56 lakhs), State Department of Horticulture (Rs. 85.85 lakhs) and State Planning Board (Rs. 85.77 lakhs). The details are given below:

[BACK](#)