



A Monthly e Magazine  
ISSN:2583-2212

March 2024 Vol.4(3),1233-1239

Popular Article

## Empowering Agriculture, The Transformative Role of KVK Initiatives: A Bird View

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<https://doi.org/10.5281/zenodo.10924589>

The Krishi Vigyan Kendras (KVKs) stand as pivotal models of agricultural extension in India, stemming from the recommendations of the Education Commission (1964-66) and the insights of the Mohan Singh Mehta Committee in 1973. Since the establishment of the first KVK in Pondicherry in 1974, these centres have burgeoned to 731 across the nation, operating under 11 ATARI (Agricultural Technology Application Research Institutes). They serve as integral components of the National Agricultural Research System (NARS), fostering the assessment, refinement, and demonstration of location-specific agricultural technologies. Functioning as knowledge and resource hubs, KVKs facilitate the transfer of technology from laboratories to farmers' fields, bridging the gap between research institutions, extension services, and farmers.

Despite resource constraints, KVKs champion innovation, driving socioeconomic empowerment among farming communities through novel approaches and collaborative initiatives. Aligned with the vision of science-led growth, KVKs prioritize technology assessment, capacity development, and ICT-enabled farm advisories to enhance productivity, profitability, and sustainability in agriculture. These centers have become catalysts for economic growth, empowering farmers with the tools and techniques needed to navigate the complexities of modern agriculture. Through on-farm testing, frontline demonstrations, and capacity-building programs, KVKs empower farmers to adopt cutting-edge technologies and best practices. Moreover, KVKs play a vital role in addressing complex challenges facing Indian agriculture, including climate change, resource scarcity, and market volatility. By fostering a culture of continuous learning and adaptation, KVKs equip farmers with the knowledge and skills needed to thrive in an ever-evolving agricultural landscape.



In essence, KVKs represent the convergence of knowledge, innovation, and community engagement, driving sustainable development and prosperity in rural India. As light of progress, these centres embody the spirit of resilience and ingenuity, shaping the future of Indian agriculture for generations to come.

### **Innovative initiative of KVKs**

#### **JSS Agri Clinic - An initiative by KVK-Mysuru,Karnataka**

- ❖ KVK-Mysuru district in Karnataka initiated the pilot program "JSS Agri Clinic" in 2013 at Suttur village, approximately 30 km from Mysuru city. The center's nomenclature as 'AgriClinic' with the tagline 'A health center for crops' in the local language effectively conveyed its purpose as a clinic for plants. Leveraging the brand value of JSS, the host institute of KVK (an NGO), bolstered its popularity given JSS's reputation as a spiritual institution offering education and health services, particularly in rural areas.
- ❖ Initially drawing farmers primarily from the two adjacent taluks known for paddy cultivation, it became apparent that the Agri Clinic's services needed broader reach across the entire district and neighboring regions. Consequently, a new outlet was established in Mysuru city in June 2015, aiming to serve more farmers in Mysuru district and those visiting Mysuru for agricultural needs from neighboring districts like Chamarajanagar, Mandya, Hassan, and Coorg.

#### **Impact**

- ❖ The three-year trial phase of the Agri Clinic proved successful, evidenced by a notable surge in all metrics during the initial quarter of the fourth year (April to July 2016). Over 3,000 farmers had visited the clinic, with total transactions amounting to Rs. 23.72 lakhs, surpassing the annual figures for 2013-14 and 2014-15 combined. The clinic's monthly transactions during the fiscal year 2016-17 ranged from Rs. 3.28 lakhs (April) to Rs. 8.10 lakhs (July), averaging Rs. 5.93 lakhs, even during the 'off-season low-key agricultural activity' period. This indicates expanded access to Agri Clinic services, not only by paddy growers during the kharif season but also by those cultivating summer paddy and vegetables year-round.



#### **Wednesday Bazaar- An initiative by KVK Hulkoti, Karnataka**

- ❖ KVK-Hulkoti operates in Karnataka state started a marketing outlet for the products produced by SHG members. KVK in collaboration with gram panchayat, Hulkoti started Wednesday bazaar during 2006.
- ❖ The products sold in the market are Vegetable fruits and food items vermicompost, crisp roties, masala powder, sweets, soaps, agarbatties and others.



### Impact

These markets have drawn a tremendous response from the people of Gadag, NGO's and Government organisations. The weekly transaction of this market is Rs. 35000-50000. About 90 SHG members and 50 individual entrepreneurs from nine villages and buyers from six villages participate in the Market.

### Cutting fodder costs by adopting an innovative method – KVK, Kannur, Kerala

- ❖ Scientists from the Kannur KVK of Kerala Agricultural University, Panniyur - **developed an innovative method to grow fodder grass (CO-3 variety) on rooftops of cattle sheds** to help dairy farmers grappling with space constraints and fodder scarcity.
- ❖ **Technique** - High density double planting with drip irrigation, involves growing fodder grass in plastic 'grow-bags'. The 1<sup>st</sup> harvest can be done after 10 weeks of planting and it can be done every 30 days. One set of plantation can give yield as many as eight times a year.



### Impact

- ❖ The innovation is attractive because of the financial gain it can give the farmers. A cow - usually given concentrate feed costing Rs.22 a kg, can easily be given five kg of green grass at Rs.5 a kg.
- ❖ **Huge saving in production cost will be a boon for the dairy sector**
- ❖ **Selling the root slips of the green grass that can give them some additional income**
- ❖ **An investment of Rs.100 a month produces fodder costing Rs.6,000 in six months.**

### Paddy Task Force (PTF) - An initiative by KVK-Kannur, Kerala

- ❖ The 'Paddy Task Force' initiative, spearheaded by KVK-Kannur in Kerala, addresses the labor shortage prevalent in the region. This strategy employs a 16-member group comprising skilled paddy field workers adept at scientific rice production using modern machinery, thus reducing costs. The task force is readily available to assist farmers upon contact, equipped with farm machinery to alleviate the burden of labor shortages.
- ❖ Farmers benefit from this approach as it ensures timely completion of farm operations at a reduced cost, charging only 20% of the standard rates. Additionally, workers receive on-field training in rice cultivation techniques and machinery maintenance, contributing to their professional growth and expertise.
- ❖ Under the Paddy Task Force initiative, KVK-Kannur leases five hectares of paddy land from local farmers for training purposes, providing necessary equipment free of charge through formal agreements. This innovative approach not only mitigates labor challenges but also enhances the livelihoods and



social standing of agricultural workers.

### Impact

- ❖ **Reduced Drudgery:** By employing modern machinery, the task force minimizes the physical strain associated with manual labor, benefiting both workers and farmers.
- ❖ **Cost-Effective Solutions:** Farmers benefit from efficient farm operations completed within a short timeframe at a reduced cost, as they are charged only 20% of the normal rate.
- ❖ **Training and Empowerment:** Workers receive on-field training in various aspects of rice cultivation and machinery operation, enhancing their skills and social status.
- ❖ **Improved Social Recognition:** Formerly considered mere laborers, task force members are now recognized as skilled professionals, elevating their social standing within the community.

### KVK-Trivandrum (Rural Extension Sub Centre)

- KVK-Trivandrum worked on imparting a three-month training for rural youth on artificial insemination to develop para technicians to bridge the larger gap between the number of veterinary surgeons and animal growers.
- ❖ The trained para technicians upon completion of the training establish a Rural Extension Sub Centre (RESC) in the village and provide AI and other services to animal growers. The KVK has an established dairy farm and regularly supplies semen for AI to the para technicians for providing services to farmers.



### Impact

- ❖ KVK has developed 35 Rural Extension Service Centres (RESC), contributing to agricultural advancements in the district.
- ❖ Para technicians associated with the RESC earn a commendable income of Rs. 20,000 per month as of 2003-04.
- ❖ The percentage of breedable cows has significantly increased from 50% in 1980 to 80% in 2000, indicating improved breeding practices.
- ❖ Paratechnicians conducted a noteworthy total of 7243 Artificial Inseminations (AIs) during the period of 2003-04.
- ❖ The age at conception for animals has been reduced from 28 months to 20 months, with an average conception rate of 62%, indicating enhanced reproductive efficiency.
- ❖ The implementation of this approach has resulted in an overall increase in milk production within the district.
- ❖ Compared to the public extension system, this approach provides timely services to farmers, addressing their needs more effectively.



### **Public private partnership model to promote fodder production - An initiative by Kvk,Namakkal,Tamilnadu**

❖ KVK Namakkal initiated public- private partnership model in fodder seed production with an objective to develop a standard for fodder seed production for livestock and to increase the economic standard of the farmers through production and supply of fodder seeds. The model was initiated in 2012 by signing MoU between farmers – KVK - Dept. of Animal Husbandry, Tamil Nadu.



#### **❖ The roles of the partners are:**

- farmers are fodder seed producers, Krishi Vigyan Kendra, Namakkal as Co-ordinator, Dept. of Animal Husbandry, Tamil Nadu as purchaser.
- Farmers should produce fodder seeds such as grasses, cereals, legumes and tree fodders as per specifications keeping 10% moisture level and handover the same to the KVK
- KVK should train and demonstrate fodder seed production to the fodder seed producers and check the quality of seeds before supplying to the Dept. of Animal Husbandry.

#### **Impact**

- ❖ The department should inform about their needs to the KVK in advance in order to procure seeds from the farmers and then supply, for which Department should pay the amount within thirty days from the date of purchase. 15% service charge will be credited to the KVK for conducting training, demonstrating seed testing cleaning of seeds, packing and forwarding.
- ❖ As per the information from the KVK in 2013 90 MOUs have been signed from 14 districts of Tamilnadu. It is reported that 30 tonnes of seeds have been produced and distributed tuning to 1.30 crores. The above achievement has been within a year period

### **Rosemary as an Alternative Crop through Institutional Approach of KVK, Erode,Tamilnadu**

❖ KVK-Erode operates in Erode district of Tamilnadu. Bargur hills is located 70 km North of Erode, at the border of Tamilnadu and Karnataka States, at an elevation of 1000m MSL. The temperature during the summer is 25-32 and in winter 20-28 degree Celsius. Annual rainfall ranges between 900 – 1200 mm. Bargur hills is a cluster of 33 hamlets in a total area of 5000 ha. These hamlets are surrounded by reserve forest. The main crops are ragi, lab lab under rainfed condition and beans, onion, turmeric under irrigated conditions. Since, the area is located adjacent to forest, wild animal like wild boar, deer and elephants are damaging the crops. Sometimes the farmers are deprived to get viable yield from the crops, even after watching during night hours. This problem resulted in migration.



**Impact**

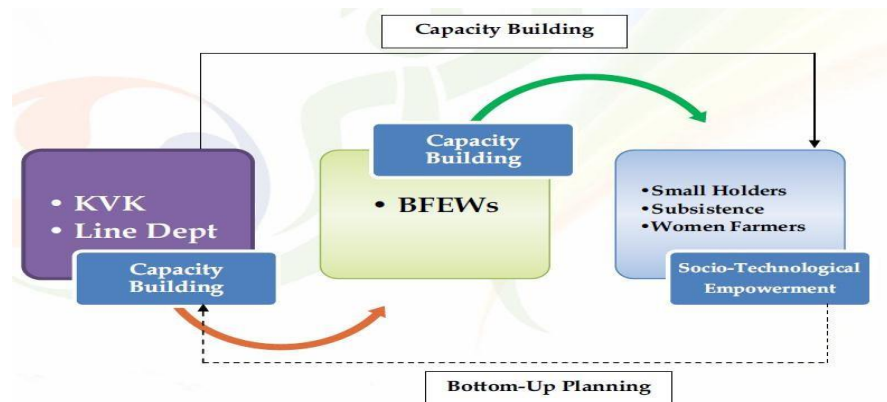
In order to solve this problem established Rosemary as an alternative crop through institutional approach. The impact created in promotion of aromatic crops in Bargur hills: Increase in farmers enrolment in rosemary growers’ association and 280% increase in farmers enrolment in Rosemary grower association.

**Farmer to Farmer Extension Model-A decentralized approach - An initiative by KVK, Ganjam-I, Orissa**

❖ KVK, Ganjam-I was established in 1985 under the administrative control of Orissa University for Agriculture and Technology (OUAT), Bhubaneswar, Odisha. The district has 3,31,256 farm families. The KVK observed that most small-scale, subsistence and women farmers lack technical, management, and marketing skills to fully understand and capture advantage of this rapidly changing agricultural market and economy.



- ❖ Realizing the situation, the KVK devised a Farmer-to-Farmer Extension approach with an aim to create a cadre of Bare Foot Extension Workers (BFEWs) who can cater the extension needs of the farming community.
- ❖ Initially Farmers Clubs (formed by NGOs/ Banks/ NABARD) were identified in selected locations and few volunteers (BFEWs) from these Farmers Club were selected on the basis of their ability and willingness to work closely with the farming community. Training need assessment was carried out and customized training programmes were designed.
- ❖ Capacity building of BFEWs will be from the scientists of KVK and line department officials, in order to enable them in providing more location-specific extension services that can increase farm income, especially among small- holders and women farmers. The schematic representation of the approach is presented in Fig:



**Conclusion**

Krishi Vigyan Kendras (kvks) significantly initiated many programmes for farming communities across India through innovative projects like the JSS Agri Clinic and the Paddy Task Force, as well as the promotion of alternative crops like Rosemary. These initiatives have enhanced agricultural production, productivity and farmers' income. Moving forward, collaboration and support for



KVK initiatives are crucial. The KVKs focused on skill development, technology transfer and market access let to empower farmers and ensure sustainable agricultural practices. However, KVKs, NGO's and farming community together can build a resilient and prosperous future for India's agriculture, driving growth and prosperity in rural communities to cater ample opportunities to further increase farmers' income and to improve their livelihoods.

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