



Research Article

Role of KVKs in Jammu & Kashmir under the Plant Protection Act 2001

Nazia Fayaz Azad¹, Fareed Ahmed Rafiqi², Bilal Ahmad Bhat³

1. School of Law, University of Kashmir; azadnaziafayaz@gmail.com

2. School of Law, University of Kashmir; fahmadmuqam@gmail.com

3. Div. of Agri. Econ & Statistics, FoA, SKUAST-K, India; bhat_bilal@rediffmail.com



Copyright © 2024 by Authors, Published by JUSTICES: Journal of Law. This is an open access article under the CC BY License <https://creativecommons.org/licenses/by/4.0/>

Received : August 26, 2024
Accepted : October 07, 2024

Revised : September 21, 2024
Available online : December 06, 2024

How to Cite: Nazia Fayaz Azad, Fareed Ahmed Rafiqi, & Bilal Ahmad Bhat. (2024). Role of KVKs in Jammu & Kashmir under the Plant Protection Act 2001. *JUSTICES: Journal of Law*, 3(4), 303-313. <https://doi.org/10.58355/justices.v3i4.133>

Abstract. The Protection of Plant Varieties and Farmers Act, 2001 is the culmination of legislative action undertaken by India to give effect to the TRIPS Agreement under the aegis of the WTO regime. This enactment is applicable in the whole of India including the state of J&K. Like in the rest of India the Ministry of Agriculture implements it through its nodal agencies known as Krishi Vigyan Kendras. This paper shall enumerate the Origin, Genesis, and mandate of Krishi Vigyan Kendras working under the aegis of the Ministry of Agriculture. It will define the role of KVKs and how farmers benefit from the schemes formulated therein. It shall illuminate the potential contribution of KVK in Kashmir Valley as an implementation machinery under the PPVFR Act 2001 and as an allied department of SKUAST-K. Needless to mention here KVKs play an important role in providing assistance and training to farmers in the shape of OFT [on-farm trials] and FLDs [front-line demonstrations] to enhance the quality of the farmer's variety.

Keywords: KVK, PGSA, PPVFR, OFT, FLD plant varieties, Genome Savior, award, Krishi Vigyan Kendra.

INTRODUCTION

Krishi Vigyan Kendra (the Farm Science Centre) is a noble concept developed by the Indian Council of Agricultural Research (ICAR) which rests upon a solid base of transfer of technology from the laboratory to farmer's field concerning Agriculture, Horticulture, Animal husbandry, Floriculture, Beekeeping, Mushroom Cultivation, Broiler Farming, and allied subjects¹. As per the recommendations of the Education Commission (1964-66) and further consideration by the Planning Commission and Inter-Ministerial Committee, the ICAR decided to establish Krishi Vigyan Kendra (KVK) in the Country². The first KVK was established in Pondicherry in 1974. Till the end of the IX Plan (2001-02) within 27 years the Govt. approved the establishment of KVKs in all the 766 districts in the country³. At present, there are 488 rural districts covered with KVKs including all the districts of J&K state⁴. The Council has a plan to set up KVKs in the remaining districts during the XII Plan period⁵. The facilities created through the network have benefited a large number of farmers in the past throughout the country⁶.

1. Aims And Objectives

- To demonstrate the latest Agricultural Technologies to the farmers as well as the extension workers of the state Department of Agriculture/Non Governmental organization to reduce the time lag between the technology generation and its adoption.
- To test and verify the technologies in the socio-economic condition of the

*Research Scholar, School of Law, University of Kashmir, email: azadnaziafayaz@gmail.com

** Ex-professor, School of Law, University of Kashmir, email: fahmadmuqam@gmail.com

*** Professor & Head, Div. of Agri. Econ & Statistics, FoA, SKUAST-K, email: bhat_bilal@rediffmail.com

¹ Singh, P., Ghadei, K., & Roy, P. (2023). Krishi Vigyan Kendras (KVKs) in India: Empowering Farmers for a Sustainable Future. *New Era Agriculture Magazine*, 2(3), 54-59.

² Sahoo, A. K., Sahu, S., Meher, S. K., Begum, R., Panda, T. C., & Barik, N. C. (2021). The role of Krishi Vigyan Kendras (kvk) in strengthening the national agricultural research extension system in India. *Insights into Economics and Management*, 8(9), 43-45.

³ Currently 766 districts in India serve as a primary point for policy implementation. The number of districts keeps changing from time to time as per the administrative convenience. Available at: <https://y2oindia.in-districts-in-india>

⁴ There are 731 Krishi Vigyan Kendras (KVKs) in the country as of July 2022. Krishi Jagat, 16 March 2022.

⁵ The Five-Year Plans were laid to rest by the Narendra Modi-led NDA government in 2015. It is considered to be the last five-year plan of India. Planning Commission has been replaced by the Niti Aayog.

⁶ Gautam, U. S., Singh, R. K., & Kumar, A. (2024). Krishi Vigyan Kendras Glorious Journey of Five Decades. *Indian Farming*, 74(3), 05-08.

farmers and to identify the production constraints.

- To get first-hand scientific feedback from the fields and pass it to the research system to keep the scientist abreast with the performance of the technologies and the farming problems, so that they re-orient their research, education, and training programmes accordingly.
- To impart training to the farmers, farm women, rural youth, and field-level extension functionaries by following the principles of “teaching by doing” and “learning by doing”.
- To provide training and communication support to the line department of the state/NGOs.
- To develop extension models to be adopted by general extension systems for large-scale multiplications.⁷

2. 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 Agricultural Polytechnics. The recommendations of the Commission were thoroughly discussed during 1966-72 in the inter-ministerial meetings including the 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 practicing farmers, school dropouts, and field-level extension functionaries. ICAR Standing Committee on Agricultural Extension, in its meeting held in August 1973, observed that the establishment of KVKs was of national importance which would help in accelerating agricultural production and also in improving the socio-economic conditions of the farming community⁸.

3. Changing Vision, Mission, and Mandate

Over some time, the Vision, Mission, Mandate, Staff setup, etc. of KVKs have undergone many changes to make them 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 the application of appropriate technologies from a specific agroecosystem's perspective.

⁷ This study is based on the pilot survey made by the author/s by way of an interview with the KVK personnel in five districts, viz. Budgam, Srinagar, Anantnag, Ganderbal, and Pulwama and the relevant research divisions of SKAUST-K.

⁸ Singh, A. K., & Burman, R. R. (2019). Agricultural extension reforms and institutional innovations for inclusive outreach in India. In *Agricultural Extension Reforms in South Asia* (pp. 289-315). Academic Press.

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

To implement the mandate effectively through the creation of awareness about the improved agricultural technologies, the following activities are defined for each KVK:

- On-farm testing to assess the location specificity of agricultural technologies under various farming systems,
- Out-scaling of farm innovations through frontline demonstration to showcase the specific benefits/worth of technologies on farmers' fields,
- Capacity development of farmers and extension personnel to update their knowledge and skills in modern agricultural technologies and enterprises,
- Work as a Knowledge and Resource Centre for improving the overall agricultural economy in the operational area,
- Conduct frontline extension programmes and provide farm advisories,
- Using ICT and other media on varied subjects of interest to farmers and
- Data documentation, characterization, and strategic planning of farming practices.⁹

KVK is also required to produce quality technology-related inputs/products (seeds, planting materials, bioagents, 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.¹⁰

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 that could be upscaled by the State Extension Services¹¹.

These SMSs are supported by technical, and administrative supporting personnel. There is a huge infrastructural base for each KVK with 20 hectares of arable land to facilitate demonstration of all technologies, a soil testing lab, a building with facilities for training and hostel accommodation for farmers, with a fleet of Vehicle/Jeep, Tractor, Motorcycle, 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,

⁹ MV, S., & Rejula, K. Technology Application, Refinement and Transfer through KVKs. Available at: <https://www.researchgate.net>

¹⁰ KVKs are grassroots-level organizations meant for the application of technology through the assessment and demonstration of proven technologies under different „micro-farming“ situations in a district.

¹¹ 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 of the disciplines of Agronomy, Plant Protection, Soil Sciences, Veterinary & Animal Sciences, Horticulture, and Home Sciences.

- (iii) convergence and linkage,
- (iv) administrative/financial guidelines, etc.¹²

4. Specialty of KVK

The Implementation of Protection of Plant Varieties and Farmers' Rights Act aims to conserve traditional and ancestral plant varieties that farmers are cultivating and maintaining through generations. Every traditional variety has some unique qualities and hence needs conservation. Farmers' rights must be preserved for the variety they have been maintaining. It becomes desirable to briefly highlight the contribution of some of the kvk's in the union territory of Jammu and Kashmir.

A. Contribution of KVK Budgam

Krishi Vigyan Kendra Budgam has contributed to the science-led growth and development of agriculture in the district. To sustain production and productivity and enable the Right to Food for all citizens, KVK Budgam strives to gear up its real-time Agri extension process and value chain development while providing solutions to farmers' problems. Krishi Vigyan Kendra Budgam is a district-level farm science Center established in June 2013 and affiliated with Shere-Kashmir University of Agricultural Sciences and Technology of Kashmir. It is situated in Harran Village about 5km from the main headquarters of District Budgam. The main mandate of the KVK is to demonstrate the latest agricultural technologies and practices generated by SKUAST-K. It also acts as a tool to do applied research on agricultural technologies and undertake trials before their transfer to farmers¹³.

The role of KVK begins after the release of varieties by the university located at SKUAST K. Once the variety is released KVK starts its Front line demonstrations to the farmers which is beneficial for the overall yield. Further, KVK also checks the suitability of the variety¹⁴. Around 60,000 farmers are registered with the KVK Budgam at Soibugh Harran. It has been able to share benefits with a traditional community namely Hapath -Nar located at Chare Sharief for the variety Kaagzi-Naakh and they have also sent the same for the Plant Genome Saviour Community Award as stipulated by PPVFR authority.

B. Shalimar Fodder Maize-1 (KDFM-1)

- First Fodder maize variety in the early group in J and K resulting from SKUAST-K and AAU, Anand Collaboration:
- Its pedigree is GM-6 x C-8
- It is a Semi flint grain and a white kernel composite with excellent green forage

¹²KVK, Agriculture Science Centre under the aegis of the Ministry of Agriculture, Agricultural Extension Division, Indian Council of Agricultural Research (ICAR) National Institute of Labour Economics Research and Development (An Autonomous Institution under NITI Aayog, Government of India)

¹³ Akhter, S., Dar, N. A., Nabi, A., Yousuf, V., Munshi, R., Sofi, K. A., ... & Zargar, K. A. Performance of Shalimar Rice-4 (SR-4) under Front Line Demonstration Programme in District Budgam, of Jammu and Kashmir.

¹⁴ Shubeena, S., Hai, A., Hamdani, S. A., Amin, I., Mahboob, S., Nisa, S. S. U., ... & Thahaby, N. (2022). Socio-Economic Determinants Along with Extension and Traditional Medicine Using Factors Among Livestock Farmers of Central Kashmir. *Acta Scientific Veterinary Sciences (ISSN: 2582-3183)*, 4(4).

and quality traits

- It has an average green fodder yield of 446 q/ha
- It is recommended by NDDB for its programmes in J and K, Gujarat, and Andhra Pradesh.

Milestones Achieved by KVK Budgam (2020-2021)



KVK has from time to time facilitated and informed farmers about their rights as a creator of farmer's variety.

KVK Budgam has started a revival program for Mushkbudji in the Khaag area located at Hanchipora Budgam.

Different varieties like Rice, K-39, CH1039. Earlier farmers used 2.5 to 3 quintals per kanal. KVK Budgam laid a demonstration on farmer's fields on SR-4 and SR-3 as well, by which farmers benefit from a yield increase of about 4 to 4.5 quintals per kanal. In the case of Maize traditional varieties were replaced by the latest university-released varieties by which the farmer's income increased by yield income. Brown Sarson farmer's traditional variety Budgam was replaced with the universally released variety SS2 Shalimar Sarson with a yield income of 117 percent. In the Oat variety, Sabzar and Kant's varieties were replaced with SFO-1 and SFO-3 (Shalimar fodder oats) in which green fodder yield was increased by more than 30 percent. Similarly, Dhanial (Coriander) and Shalimar Meethi (fenugreek) were also introduced in different areas of the district.

KVK Budgam has no such policy at the local level yet, they are following the guidelines formulated at the national level but sometimes fail to address the problems related to particular crop varieties.¹⁵

5. Contribution Of KVK Ganderbal

To safeguard farmers' rights as per PPVFR ACT 2001 KVK Ganderbal identified various farmers' varieties and undertook various procedures through a Research

¹⁵ Matto, J., Dar, M., Shah, Z., Beigh, M., & Mir, R. (2017). Constraints faced by the paddy growers in adoption of recommended paddy production practices in Budgam District of Kashmir, India. *International Journal of Current Microbiology and Applied Sciences*, 6(12), 1206-1214.

system for safeguarding and releasing new plant varieties [under farmer name as per the procedure]

i. **Main Focus**

More than 25000 farmers are presently registered on KISAN SARTHI PORTAL of KVK Ganderbal and approximately 50000 farmers shall be registered by JUNE 2024.¹⁶

ii. **Benefit Sharing**

KVK Ganderbal has initiated the process of protection of various plant varieties and after completion of due process proper care will be taken to share the benefits with traditional community or farmers groups in this regard. KVK Ganderbal is in the process of registering various farmers variety the exclusive rights as envisaged under the act shall be extended to the relevant farmers and communities including their women folk.¹⁷

iii. **Revival Programmes**

KVK Ganderbal is at the forefront of reviving various traditional varieties, particularly AMBRI APPLE, MILLETS, FODDER CROPS, etc.

iv. **Varieties**

KVK GANDERBAL undertakes large-scale demonstrations of various varieties in cereal crops vegetable fodder oilseed horticulture crops. Large-scale demonstrations through OFTS FLDS are being undertaken along with other programmes sponsored by ICAR. The varieties that have been released and recommended by the university for different agroecological zone location altitudes are being propagated for large-scale adoption in addition to on-farm testing of pipeline new varieties which are to be introduced in the coming years.¹⁸

v. **Institutional Policy**

SKUAST-K and KVK Ganderbal have adopted the IPR policy for the protection of plant and seed varieties at local levels in collaboration with the National Seed Project and division of Genetics and Plant Breeding and other relevant divisions/institutions based on different crops as per the PPVFR ACT 2001.¹⁹

C. Contribution Of KVK Srinagar

KVK Srinagar is an extension service of SKUAST- K. Instead of PPVFR ACT 2001 the center is facilitating mandated activities provided to farmers like FLDs and OFTs. It has 15000 farmers registered on the portal²⁰.

¹⁶ Based on the direct interaction between the authorities at the KVK with the author/s and the information obtained thereof.

¹⁷ Bhat, Z., Malik, R., Baba, S. H., Bhat, B. A., & Shah, T. H. (2021). Women Empowerment through SHGs with Reference to District Ganderbal. *Int. J. Curr. Microbiol. App. Sci*, 10(01), 1636-1647.

¹⁸ Baba, S. H., Ali, G., & Wani, M. H. (2018). *Technological interventions in rice- To double farmers' income in Kashmir Valley. Policy Research Series*. SKUAST-K/2018/01, SKUAST-Kashmir.

¹⁹ Mir, R., Beigh, M. A., Shah, Z. A., Singh, R., Matoo, J. M., & Dar, M. A. (2018). An assessment of the knowledge level of apple growers about recommended apple spray schedules in District Ganderbal, Kashmir, India. *Int J Curr Microbiol App Sci*, 7, 1366-1373.

²⁰ Krishi Vigyan Kendra Srinagar was sanctioned by ICAR vide their communication NO: 5-9/99/AE-II dated 8th July 2002 at K. D. Research Station, Old Airport. The Kendra came into operation in the year 2003 and was envisaged to act as an innovative institutional model for assessment,

i. Benefit Sharing

As far as benefit sharing is concerned under the Protection of Plant Varieties and Farmers Rights Act 2001, KVK Srinagar has successfully shared benefits with scheduled tribes of Fakir Gujri.

ii. Main Focus

For KVK Srinagar Farmer First is the slogan that forms the main focus of the Kendra.

iii. Varieties

Apple varieties, mushrooms, and Cherries including all the latest varieties released by SKUAST K are being dealt with at the Kendra.

iv. Revival Programmes

The cherry rootstock is being revived at Fakir Gujri in its revival programme as the main plank of KVK Srinagar.

v. Institutional Policy

No policy has been framed at the local level yet, but all the national guidelines released by ICAR and IMSS are being followed in true spirit and to the best of their knowledge and capacity²¹.

D . Contribution Of KVK Anantnag

The Protection of Plant Varieties and Farmers' Rights Act, 2001 in India aims to protect the rights of both plant breeders and Farmers. Krishi Vigyan Kendras (KVKs) play a significant role in creating awareness and providing education regarding the Act. Besides facilitating capacity building among farmers, they contribute by disseminating information about plant varieties, aiding them in understanding and exercising their rights under the legislation, and promoting the use of registered varieties. Overall, KVKs serve as important intermediaries in the implementation of the act at the grassroots level.²²

i. Main Focus

Currently, KVK-Anantnag has a registration of more than 30,000 farmers. Among them, several farmers are actively involved in preserving plant genotypes with unique qualities. These genotypes are slated for further scrutiny through Distinctness, Uniformity, and Stability (DUS) characterization, ensuring the sustained conservation and evaluation of these valuable plant varieties²³.

ii. Varieties

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 its realm of responsibility includes the whole District of Srinagar.

²¹ BISEN, P. K. PROMISING PARTNERSHIP OF INDIAN YOUTH IN DEVELOPMENT AND AGRICULTURAL ENTREPRENEURSHIP. Available at: <https://www.researchgate.net>

²² Nissa, R. U. H. U. L., Zubair, M. O. H. D., Ghani, I. F. F. A. T., & Jahan, N. A. S. R. E. E. N. (2017). Custom hiring centre: An emerging trend-benefits, constraints, and way forward concerning Nicra village in Wakhawan, district Pulwama. *International Journal of Research in Applied Natural and Social Sciences*, 5(5), 111-124.

²³ Supra note 15

It focuses on the Rice varieties like Shalimar Rice 1, Shalimar Rice 2 Shalimar Rice 3 K39, K78-1 Jhelum, and Chenab rice varieties, etc.²⁴.

iii. Benefit Sharing

Under the PPVFR Act 2001, the Farming community of villages “Sagam & Danwathpora, Sagam, Kokernag-Anantnag (J&K), cultivating and preserving the rich heritage of **Rice varieties, specially Mushkbudji & Kamad** having aroma and high cold tolerance, were conferred with **Plant Genome Saviour Community Award** with a cash prize of Rupees Ten Lakhs in 2013-14. The award was a result of joint efforts made by MRCF -Khudwani and KVK-Anantnag both working under the aegis of SKUAST-Kashmir. This award recognizes farmers’ contribution to conserving and cultivating indigenous plant varieties²⁵.

iv. Revival Programmes

During the survey, it was revealed that the constituent units of SKUAST-Kashmir are actively engaged in Revival Programmes aimed at safeguarding extinct varieties. These programmes extend to niche-based and indigenous crops²⁶.

v. Institutional Policy

The institution has an apt policy regarding IPR regulations framed by SKUAST K at the local level and DARS BUDGAM.²⁷

CONCLUSION

The KVKs have remained quite crucial for the implementation of the Protection of Plant Varieties & Farmers Act 2001 as the nodal agencies at the grassroots level. In J&K every district has one KVK to monitor the Act in action, especially with the supervision, direction, and regulation of the research institutions and agricultural universities. KVKs in J&K work in tandem with SKAUST-K in the valley and have done a lot of work in terms of identification, marking, conservation, and patenting the plant varieties indigenously produced in its favorable environment and climatic conditions. The present study has covered the kvks of 5 vital districts in the valley out of the 10 existing to provide a fair idea regarding the growing scope of agro-industry backed by the latest technology and the required infrastructure for further research and development. The parameters covered in the survey almost cover the whole gamut of plant protection covered under the Act. We see a positive development taking place towards sustainable development and inter-generational equity through the proactive role of these Kendras in ushering in the next green revolution in India.

²⁴ Hussain, A., Bhat, M. A., Ganai, M. A., & Hussain, T. (2009). Comparative performance of the system of rice intensification (SRI) and conventional methods of rice cultivation under Kashmir valley conditions. *Indian Journal of Crop Science*, 4(1and2), 159-161.

²⁵ After GI Tag, Kashmir's Indigenous Rice Variety 'Mushkbudji' Set To Enter International Market, May 2, 2023, available at: <https://www.etvbharat.com>

²⁶ Sofi, N. R., Hussain, A., Shikari, A. B., Sofi, M. D., Teeli, N. A., Mohiddin, F. A., & Bhat, N. A. (2020). Rice crop in Kashmir Valley: historical perspective, challenges and opportunities for sustainable production and livelihood improvement. *SKUAST Journal of Research*, 22(1), 123-129.

²⁷ Lone, F. A., Nanda, A. M., Rather, J. A., Bhat, M. S., & Kanth, T. A. (2021). RESOURCE USE EFFICIENCY OF RICE FARMING IN JAMMU AND KASHMIR, INDIA. *Agricultural Research Journal*, 58(3).

REFERENCES

- Adhiguru P., P.S. BIRTHAL and B. Ganesh Kumar (2009), Strengthening Pluralistic Agricultural Information Delivery Systems in India, *Agricultural Economic Research Review*, 22.
- Asiwal, B.L., L.R. Balai, J. Akhter and R.C. Asiwal (2015), Role of KVK in enhancing the productivity and profitability of moong bean through FLDs in Sikar district of Rajasthan, *Agriculture Update*, 10 (3), pp. 221-25.
- Bar, Narayan (2015), Impact of KVK in Transferring Knowledge to Tribal Farmers on Farm Activities, *Global Journal of Science Frontier Research: D Agriculture and Veterinary*, 15(3), p.29.
- Behera, S. K., J. R. Maharana, P. Acharya (2014), Transfer of Technology through Krishi Vigyan Kendra for the Tribal Farmers in Hilly Areas of Koraput District, *Indian Journal of Hill Farming*, 27(2): 34-37.
- Birner, R., and J.R. Anderson (2007), "How to make agricultural extension demand-driven? The case of India's agricultural policy", IFPRI Discussion Paper 00729, Washington, D.C.: International Food Policy Research Institute.
- BIRTHAL, P.S., S. Kumar, D.S. Negi, and D. Roy (2015), The impacts of information on returns from farming: evidence from a nationally representative survey in India. *Agricultural Economics*, 46: 549-61
- Glendenning J. Claire, Suresh Babu and Kwadwo Asenso-Okyere (2010). Review of Agricultural Extension in India: Are Farmers' Information Needs Being Met? IFPRI Discussion Paper 01048, December/
- Government of India, NITI Aayog (2015). Raising Agricultural Productivity and Making Farming Remunerative for Farmers – An Occasional Paper. 16 December.
- Government of India, Ministry of Agriculture & Farmers Welfare (2015-16). State of Indian Agriculture. Directorate of Economics and Statistics.
- IAMR (2015). KVKs' Impact on Dissemination of Improved Practices and Technologies – Evidence-based field study" Institute of Applied Manpower Research, New Delhi
- ICAR, Agricultural Extension Division. Report of the High Power Committee on Management of Krishi Vigyan Kendra (KVK).
- Kumbhare, N.V., S.R. Khonde (2009). Impact of KVK Training on Farmers' Adoption Behaviour and Knowledge Gain, *Indian Journal of Extension Education*, 45(3 & 4), pp. 60-62
- Maheswara Rao, D. Uma, G. Sridhar, (2014), Knowledge gained among the benefits such as Ambri apple, Red Rice, saffron, Kalazera, etc. KVK serves as a facilitator, playing a pivotal role in collaborative efforts under a participatory mode. Working in tandem with these units, we identify areas of intervention and provide crucial inputs and assistance for the successful implementation of revival programmes. One such revival program not only resulted in ensuring the preservation of valuable agricultural diversity but also helped in boosting of Mushkbudji variety of Rice at the national and International levels.
- Krishi Vigyan Kendra through its technology transfer through Demonstrations

- compared to non-beneficiaries – A case study of Krishi Vigyan Kendra, Visakhapatnam district, 3(1), pp. 8870-86.
- Menon J.Sreevalsan, Asha, and Siljo Johnson (2013), Effectiveness of training programmes of Krishi Vigyan Kendra (KVK) on mushroom cultivation, In. Journal of Recent Scientific Research.
- NSSO (National Sample Survey Organization) (2003), 59th Round, Situation Assessment Survey of Farmers (Report No. 498 (59/33/1). New Delhi: Ministry of Statistics and Programme Implementation.
- NSSO (2005), Situation assessment survey of farmers: Access to modern technology for farming, 59th round (January-December 2003), Report No. 499 (59/33/2). New Delhi: Ministry of Statistics and Programme Implementation.
- OECD (2017). OECD Economic Surveys: India. February.
- OECD/FAO (2016). OECD-FAO Agricultural Outlook 2016-2025. OECD Publishing, Paris.
- Rao BVLN, Chapter: Indian Agriculture Scenario, in “Towards Skill Endowed Human Resources in Agriculture” (2014), edited by D. Rama Rao, BVLN Rao, Rashmi Agrawal.
- Subburaj, V.K. (2013), Impact of Krishi Vigyan Kendras on the Beneficiaries in Tamil Nadu and Puducherry, Ph.D. thesis, Gandhi gram Rural Institute, Gandhi gram, Tamil Nadu
- Sulaiman, R. and A. Hall (2002), Beyond technology dissemination: Can Indian agricultural extension re-invent itself? ICAR Policy Brief No. 16, New Delhi: Indian Council of Agricultural Research.
- Sulaiman, R. and G. Holt (2002), Extension, poverty and vulnerability in India: Country study for the Neuchatel Initiative. Working Paper 154. London: Overseas Development Institute.
- Sulaiman, R. and A.W. van den Ban (2003), Funding and delivering agricultural extension in India, Journal of International Agricultural and Extension Education, 10(1), pp. 21-30.
- Sulaiman, R. (2003a), Agriculture extension: Involvement of private sector, Occasional Paper 29, Mumbai: Department of Economic Analysis and Research.
- Sulaiman, R. (2003b), Innovations in agricultural extension in India, Rome: Food and Agriculture Organization of the United Nations, Sustainable Development Department.
- Sulaiman, R. and A. Hall (2008), The fallacy of universal solutions in extension: Is ATMA the new T&V? www.innovationstudies.org/index.php?option=com_myblog&show=TheFallacy-of-Universal-Solutions-in-Extension-139.html&Itemid.
- Suresh, VK and Suresh A, Public Sector Agriculture Extension in India: A Note, Review of Agrarian Studies vol. 6, no. 1 January-June 2016)
- Venkatesh P. and M.L. Nithyashree (2014). Institutional Changes in Delivery of Agricultural Inputs and Services to Farm Households in India. Agricultural Economics Research Review. Vol 2, pp. 85-92.