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## Destiny extension training perspective in India

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### Abstract

Agricultural improvement and its studies together with extension organizations growing a community of research-Extension device which also known as Agricultural knowledge facts gadget (AKIS). AKIS is described as know-how triangle shaped by studies, training, extension and farmers at heart of the triangle. to bolster countrywide Agricultural research Extension system (NARES), ICAR has initiated several frontline extension strategies along with country wide Demonstration (1964), Operational studies mission (1974), Krishi Vigyan Kendra (1974), and Lab to Land program (1979) which clubbed together in KVK in 1992. The mandate of KVK has been advanced from vocational training to era evaluation and Demonstration for its utility and potential improvement in a district for its rising contribution in NARES in India. even though technologies generation at research centre of ICAR or kingdom Agricultural university, however era assessment for region specificity, refinement for micro location on farm real problem basis, then final validation of technology for large scale adoption by farmers were carried out with the aid of KVK. The technologies assessment and Refinement (TAR) system validate technologies via on farm trial with lively participation of farmers accomplishing holistic on farm scenario analysis with the aid of scientists of KVK. The like minded consistent technology to farmers after TAR were in addition fed in to extension system for massive scale adoption accomplishing the front Line Demonstration by way of close supervision of KVK scientist with extension officials for convincing the result. potential improvement of farmers, farm women, rural youngsters, NGOs, extension functionaries is achieved by means of KVK thru education software, linkage with allied groups for complementary service company. KVK also act as single Window transport machine and know-how aid Centre for varied technological merchandise supply and advisories to reach larger clients in district through ICT medium. a whole lot of convergence sports executed through KVK with stakeholders in a district to offer best service to the farming network in a district.

**Keywords:** Extension, KVK, ICAR and institute

### Introduction

Extension has been positioned to serve manufacturing oriented programmes, area development tasks, goal organization primarily based service schemes, and largely as a technology transport mechanism. inside the process, easy cause for which it's far designed, particularly "helping human beings to assist themselves" with the aid of pertaining to technology to the needs and possibilities of the farmers have not been emphasized tons. There might be three vital factors. For the most element, the united states has been preoccupied with the aim of accomplishing food self-sufficiency. additionally, there has been a robust situation that the improvement programmes should be equitable to all segments of the rural population. Thirdly, the emergence of new agricultural generation, made up of seed fertiliser aggregate, had an over-whelming have an effect on at the developmental efforts in the publish-inexperienced revolution era, there is a qualitative change in the scenario and the food safety has been carried out. alternative poverty remedy Programmes have been put into operation to lessen the rural inequalities. however, the emergence of breakthrough technology has ceased to evolve, for the past numerous years.

The 'era push', so dominant a issue inside the 60s and 70s, isn't so essential to expose its on the spot have an effect on. As a end result, the function assigned to the extension machine because the 'handmaid of research" does now not appear to be useful any extra. In fact, the context wherein extension has been running has changed in many methods. As enjoy has indicated, the extension service runs into problems every time it becomes stagnant and gets ritualized dropping its dynamism in dealing with the local and temporal versions or

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demanding situations posed via a developing agriculture. It's miles now a widely time-honored reality that sound agricultural development is crucial for universal economic progress. Given its variety of agro-ecological placing and extra than a hundred and forty million farmers, agriculture is confronted with a incredible variety of desires, possibilities and possibilities. If it's far to reply efficiently to the brand new demanding situations posed, extra attention will have to be paid to information primarily based technologies and improve approach of dissemination to transmit the records to farmers.

The country wide commission on Farmers has drawn attention to the expertise deficit, which constrains agricultural productiveness. To over come this, farmers need to have an powerful linkages with Universities and first-rate practices. an awesome extension system is the manner for achieving this linkage, which for the existing has truly collapsed in maximum states, partly due to constraints on non-plan expenditure. As a end result farming practices in large components of the usa are sub-top-rated.

### Evolution of Extension System and Approaches

**Operationalised:** Extension offerings in India have historically been funded and introduced through government. Organised attempts on this direction commenced after the us of a became unbiased in 1947. Pre-Independence efforts were largely local tries, driven mainly through the humanitarian essays of some individuals and businesses. these were area-particular and had limited impact. independent India mentioned the relevance of extension pretty early, a decade in advance than prepared tries to reinforce agricultural research were initiated within the country. external useful resource for agricultural improvement emphasized extension in the Fifties. network development technique was positioned into action and important programmes, the network development (CD) and the national Extension carrier (NES) were clean examples of the govt. of India's dedication to provide some of services in such areas as agriculture, health, animal husbandry, and so forth. to all sections of society. With little progress on the agricultural front, the want to pay unique attention to agriculture turned into realised, and for the reason that Sixties many new programmes that intention to raise agricultural production had been initiated. till the 1960s, agricultural extension was purely a characteristic accomplished beneath the steering of the country Departments of Agriculture (DoA).

Extension turned into undertaken through included method. some of improvement programmes like IADP, IAAP and so forth., have been released. ICAR also initiated a few programmes as the Lab-to-Land Programme and the Operational research Programme that were merged with the KVKs in the 1990s. state Agricultural Universities (SAUs) initiated education programmes (for officials and farmers), demonstrations and exhibitions, and those were strengthened with the status quo of the Directorate of Extension in every SAU for university primarily based Extension education method. establishments created for the advertising of precise commodities (Commodity based totally Extension method) and specific areas (Command vicinity development government) additionally initiated extension sports. Extension was handled basically as a public suitable, and with only the general public sector worried with technology development and switch, the focal

point turned into on spreading the reach of extension to all elements of the united states of america through more extension team of workers and a big quantity of programmes (Birner et. al, 2007)<sup>[2]</sup>.

### World Bank-funded Training and Visit (T&V) system

It progressed the funding and manpower intensity of extension and brought a unified command machine of extension. The T&V machine that largely omitted the agro-climatic and socio-economic diversity of the united states produced blended results. A assessment of evaluation research of the T&V machine found out its extraordinary profits (in terms of productivity) in irrigated regions and its failure to make impact in most people of the rainfed regions. The want for a proper analysis of institutional and socioeconomic elements in rainfed areas, and the significance of social technology capabilities in making applicable interventions turned into also highlighted with the aid of Farrington *et al.*, 1998<sup>[1]</sup>. since the 1980s, more and more NGOs, agro-enter industries, and agro-processors have also end up involved in agricultural extension sports. Now farmers' associations and producers' cooperatives are also worried in extension offerings for decided on plants and commodities.

A massive quantity of extension services are being supplied by way of enter organizations, particularly fertilizer businesses. With boom in rural literacy, the newspapers are devoting more space to reports associated with the use of agricultural era. With external guide drying up, many States determined T&V unaffordable, and the Nineteen Nineties noticed them experimenting with the provisions of extension services. those experiments covered decentralisation (extension making plans and manage under elected bodies on the district/block stage), contracting NGOs for a few extension sports, the adoption of institution tactics (as opposed to the sooner character technique), the usage of para-extension people (as substitutes for DoA subject extension people, and the setting up of multi-disciplinary SAU teams at the district degree. any other trend has been the formation of unique organisations (which can be much less bureaucratic, extra bendy, and feature wider information) to implement special programmes related to agricultural development. This has been a reflection of the increasing inability of line departments to supply consequences due to their strictly enforced hierarchies, beside the point reward systems, loss of accountability, and constrained information.

**Future Extension Education Initiatives:** Inside the cutting-edge state of affairs of changing agri-rural surroundings the position of extension schooling and generation delivery machine is also changing. broad based totally extension strategies are the want of the day. Harnessing advances in frontiers of technological know-how in decided on precedence areas with larger spin-off benefits by means of specializing in primary and strategic research additionally assumes importance. We need to look for alternatives to the prevailing public agricultural extension system inside the usa. A paradigm shift from single area orientation to multi-disciplinary technique is critical for research inside the field. Privatization, making plans, tracking, assessment and assessment as middle additives of studies control technique should be recommended. Due significance have to be given to the subject of Extension

education and intermittent modifications within the curriculum want to be integrated to decorate its applicability in NARS.

**Extension schooling research:** research in extension basic research within the field isn't always being finished. We nevertheless are doing in the main research in the discipline of diffusion and adoption and conversation. very few studies are taken nowadays on troubles like extension techniques and strategies, research methodologies and psychometric evaluation. The division of Agricultural Extension, ICAR does now not have linkage with state Agricultural Universities or ICAR Institutes and are not carrying out any extension studies. there's no coordinated task in extension nowadays. Even the extension experts are not visible in formulating research on implemented research as a remarks to research machine. control and different behavioural standards are taught within the put up graduate curricula however the same aren't being carried out in research.

We need to reorient the curricula of extension training at post graduate degree and put together ourselves to perform research research in those aspects, with a purpose to enhance the discipline and preserve its exclusivity. management ideas and equipment so critical in pursuing extension education programmes, need to be introduced in the practice at put up graduation, Ph.D. and area stage. production to advertising: countrywide commission on Farmers (NCF) indicated that farmer-to-farmer mastering and generation transfer is maximum frequent and is located to be reliable. Farm faculties on the farms operated by using farmer-achievers have to be installed in large quantity in extraordinary agro-climatic zones and farming system regimes. Farm faculty and Farmer area faculty may be powerful equipment in farmer led extension. It has come to be an absolute necessity to shift extension attention from manufacturing-orientation to market-led extension resulting in increasing farm income through adopting stop-to-stop approach. market-led extension assist the farmers to reduce the production fees, improve the first-rate of farm produce, boom the product cost and marketability resulting in increasing of income to the farmers.

#### **Research-Extension Farmer and Market Linkages**

Are being undertaken in a routine manner in the present context. although, there's interplay among extension and farmers, there's low level of interplay between research and extension; and between studies and farmers. This location needs extra recognition, as era era has to remember the farmers' desires, context and the possibilities available. the mixing of research, Extension, Farmer and marketplace linkages, need to be addressed by means of venture research and extension activities through the participatory era improvement mode, creating a research-Extension-Farmer and market coordination committee at kingdom degree to take essential coverage initiatives to enable and establish linkages.

At zonal stage establishments like Zonal studies Stations and line departments need to prepare a zonal agricultural improvement approach through consultative technique. At district and below degree, the important thing establishments like KVK, ATMA and farmers organizations want to have a close linkage with every other for generation evaluation, refinement and to create a platform between farmers' groups and marketplace possibilities. The studies

and extension time table of the district is about by using multi disciplinary group concerning scientists, extension workers, farmers and other stake holders, which might ensure R-F-E-M linkage.

**Collegiate participation of farmers:** No matter the articulate and increasingly large body of literature on participatory research and extension methods, plenty of the paintings that has been performed beneath the farmer first and farmer participatory studies framework focuses particularly at the research dimension of agricultural era improvement and dissemination methods. Concrete examples of the application of the underlying ideas of participation, indigenous knowledge, and the customers' (or farmers') attitude to the extension feature and a dialogue of the consequences of these issues to agricultural extension systems had been relatively constrained. greater of "Collegiate Participation" is essential now-a-days, where one-of-a-kind partners work collectively as colleagues or partners. ownership and duty are equally disbursed among the partners, and selections are made via settlement or consensus among all actors.

#### **Internet enabled era dissemination:**

Extension is now turning into extra diverse, generation extensive, information orientated and greater demand-driven. This requires the extension employees at the reducing part degree to be master of such a lot of trades, that is neither conceivable nor feasible. Use of IT in extension enables the extension people to be greater effective in meeting the information desires of farmers. The developing facts and verbal exchange generation is used extensively in the whole developmental zone except in agricultural zone. Use of interactive multimedia and such other tools will help the extension workers to serve the farmers higher. We do not have net primarily based technology content material at one region and there's a need to develop appropriate content so that the equal may be accessed thru ICT. further, extension structures have to utilize the existing print and digital mass media for quicker dissemination of information to farmers.

The technological development in telecommunication and area generation must be absolutely tapped for devising appropriate programmes for farmers. capacity building programmes had been taken up for specifically public media employees. there may be need for potential constructing for each public and private programme manufacturers on shipping of agricultural facts for farmers through television and Radio. Often records is disseminated without expertise the desires of the farmers, or the contexts in which they are able to get admission to and use information. For information to empower farmers, it need to bring into recognition the want to enhance farmers' capacities to examine and recognize data and act on it via speaking their views. Of all the method of mass verbal exchange, network radio has numerous advantages. The energy of community radio lies in its participatory nature, as both its content and generation are human beings-oriented. it is an affordable manner of communication, where the humans themselves increase troubles and identify their very own priorities. consequently, the capacity of this medium ought to be used efficaciously for location precise and need based facts in agriculture. powerful use of Mass media and ICT may be

one of the viable approach for bridging information deficiency among farmers at a quicker rate.

### Developing Cases as Tool for Technology

**Dissemination:** The case observe is maximum useful for telling the reader “How” or “Why” a situation exists. at the same time as writing the case study, it is critical to understand that case studies can bring together important topics in a vicinity’s records of improvement and could want to call stakeholders with out prejudice. subject matters can be supplied from many factors of view in a case, frequently with greater innovative freedom than in an educational paper. achievement story is the successful-beneficial or desired result or outcome of a programme. In different phrases, you need to paint a photograph as to how ‘Extension’ makes a distinction in the lives of the humans it serves. A achievement tale shows how extension has made a difference in people’s lives. It describes superb trade and advantages. fulfillment testimonies are written to proportion programme thoughts and to learn what works and what does not work.

The cause of writing fulfillment testimonies is to deliver to the stakeholders or farmers the trouble situation (may encompass who recognized the problem and the way it turned into addressed), Extension programme sports, effects, or influences. both case have a look at and achievement tale may be very powerful tool for expertise an occasion which has taken area. We want to explore and take a look at such tools for studying lessons and observe inside the future extension projects successfully.

**Agriculture as a profitable challenge:** The contribution of expertise as a thing of manufacturing is beginning to collect dominant function in destiny alternate, investment and technological change in agriculture in addition to other sectors of economy. The management of knowledge not just in farms and companies but also in non-farm area will, thus, come to be vital. but the manufacturing and replica of understanding will no extra be ruled by way of the conventional norms of public area, scrutiny and substantive needs. it's far the anxiety among public need and personal control with a view to mount the primary venture. The strategy proposed is geared toward making Indian agriculture now not best globally extra aggressive however additionally domestically greater modern with the aid of the use of expertise as a strategic aid in order that agriculture sustains livelihoods of millions of households based upon it in an environmentally sustainable way.

The most important contention is that India ought to not view the challenges posed by WTO as if it's going to remain usually an importing country and that it has no substantial highbrow property to provide to international marketplace. The essential NGOs and different colleagues who criticize the idea of intellectual belongings rights have perhaps now not been exposed to the resourceful capacity of Indian society. Honey Bee network has confirmed over last ten years via its records base having about ten thousand entries of innovations and excellent examples of conventional information, innovations and practices, the huge contribution those grassroots innovators can make toward this motive. upload to this the capacity that Indian scientists have and one might realize why journeys beneath WTO can certainly make R and D in formal and casual region as the pivot of socio-monetary transformation of our society. it's

miles actual that India have to negotiate modifications in trips to suit our necessities. However, we are able to lobby for those adjustments due to the fact we are a part of WTO. Liberalization of worldwide alternate in agriculture has unfolded new vistas of increase. India has a aggressive benefit in several commodities for agricultural exports due to near self-sufficiency of inputs, quite low labour prices and diverse agro-climatic situations. those elements have enabled export of several agricultural commodities over time such as marine products, cereals, cashew, tea, espresso, spices, oil meals, culmination and veggies, castor and tobacco. For positive commodities like Basmati Rice, India has a gap marketplace access in spite of competition.

Agricultural imports are about five to six consistent with cent of overall imports within the us of a. only a few commodities like edible oil, cotton, pulses and timber and timber merchandise are imported. elevating the extent of productiveness and pleasant requirements to across the world aggressive tiers is one of the main challenges following the dismantling of quantitative regulations on imports, as in line with the WTO settlement on Agriculture. For several commodities, our national productivity is much less than the arena average. within the united states of america, there are wide versions in productivity degrees. Punjab, Haryana, Andhra Pradesh may also have attained productivity levels of a international fashionable. however different areas are way behind. for that reason the issue of competitiveness is also location precise.

A domestically differentiated method, taking into money owed the agronomic, climatic and environmental situations, is therefore, sought to be pursued to recognize the full capacity of yield in each region. Comparative benefit in itself is a relative concept and it depends upon the relative modifications in the international marketplace. A first-rate difficulty faced by way of India in the international marketplace is the excessive degree of domestic support and export subsidies given by way of developed countries for agri exports. therefore, it is vital to adapt concrete strategies to make Indian agriculture aggressive and decorate its performance. For this purpose, on one hand we should be in search of massive reduction within the assist given to agriculture with the aid of developed nations, alternatively, Indian agriculture could also require to be supported to hold and improve its competitiveness. The farmers are had to be privy to the export capacity of various crops, which may help them in determining unique crop based totally businesses. accurate decision about the company will permit to take advantage of the potential of farm corporation to the fullest volume. Extension professionals need to emphasize advertising of rural entrepreneurship for empowering farmers, farm ladies and rural youth. Micro-finance can be an effective tool for creating entrepreneurship environment. Small groups of farmers/ farm women (Self assist corporations) are engaged in thrift and inner lending to build up a credit lifestyle, but farmers who possess more than 2 hectares of land ought to deal with forming industrial growers affiliation to provoke agri-ventures. we've got seen a success marketers the usage of stepped forward technologies like seed production of hybrid rice, covered cultivation of plant life and greens are incomes excessive earnings. Agri-based farm firms can also be worthwhile challenge (NSSO, 2005)<sup>[4]</sup>.

The best of produce is also very crucial in the context of agri-company. The extension system emphasizes on the

quantity of production but the exceptional of the produce fetches more marketplace costs and extra earnings. The first-rate requirements like HACCP, EUREPGAP and so on., are vital for export to the global marketplace. We want to empower the farmers with the message of high-quality standards. Scaling up of organization mobilization: The emphasis must be on improving the get admission to of the bad to micro- Finance (mF) in place of just micro-credit. The method includes financing of SHGs promoted with the aid of outside facilitators like NGOs, bankers, socially spirited individuals and government agencies, as also advertising of SHGs by way of banks themselves and financing SHGs at once by way of banks or in a roundabout way wherein NGOs and similar businesses act as monetary intermediaries as properly.

### Conclusion

Numerous of the institutional improvements which have come up in response to the weaknesses in public research and extension system, have given sufficient indications of the emergence of an agricultural innovation device in India. This has resulted in the blurring of the in reality demarcated institutional boundaries among studies, extension, farmers, farmers businesses, NGOs and private companies. Extension has to play a completely vital position of facilitating the nodes to generate get entry to and switch information among special entities within the innovation machine. It also has to create competent institutional modes to improve the overall performance of the innovation device. lack of ability to play this crucial function would marginalize extension in addition.

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