INFORMATION REVOLUTION IN INDIAN AGRICULTURE

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Introduction

Indian agriculture contributes 32% to the G.D.P and after 53 years of independence about 64% of Indian population still depend on agriculture. Economic reforms were started about 8 years ago in the country. Accordingly, each and every sector has changed its strategies in view of global competition However, for information dissemination at farmers level age old concepts of grossroot level workers and adopted villages & localities are continuing where after introduction of technology, you have to wait for years together, so that it percolates to- the remaining farmers. Even in adopted villages people take interest only till the project/ programme is there after project is over they again come to the point from where they had started, and despite providing free of cost, extension services, only 25-30% technologies have reached to the farmers field.

Though we have a vast network of 4 deemed universities, 45 ICAR institutes, 4 bureaux, 30 national research centres, 28 state agriculture universities, one central agriculture university, 261 KVKs, 8TTCs, 4EEIs, and state governments set up, for research education and Extension in agriculture, we have still not been able to bring about a dramatic change in the agriculture sector. No doubt, we are self sufficient in foodgrain production with 205.91 million tonnes (Rice-88.25 million tonnes, wheat - 74.25 million tonnes, coarse cereals - 30.35 million tonnes pulses-13.06 million tonnes) Surpassing all records and also Milk -78 million tonnes, fruit & vegetables -104 million tonnes, Eggs-31380 million, Fish -55.81 lakh tonnes, Cotton-i 19.9 lakh bales of 170 kg. each Sugarcane- 3093.1 lakh tonnes, Potato -241.5 lakh tonnes and Onion - 47.5 lakh tonnes for the year 1999-2000.

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Stocks of foodgrain with food corporation .of India are at a record high but in view of liberalized economy and global competition, we should not be satisfied only with the self sufficiency because inspite of self sufficiency the plight of the small farmers and landless agricultural workers in the villages remains the same as before. The rural poor still go hungry because they do not have the purchasing power. Many continue to live in primitive conditions without basic aminities and about 30% of the population can not still meet its nutritional requirements. "Inspite of near food self sufficiency in the county, still large population living in hilly and tribal areas do not have assess to food" (Dr. Mangla Rai, 2000). It is because India as the country may be self sufficient but most of the states are still starving and unable to produce sufficient foodgrain to meet their requirements. So until and unless this big lot is first properly fed it will not enable them to complete in the global market with increase in yield and its quality. Poverty level will rise & situation will become worse. Farmers despite hard work and intensive techniques, if they are not better educated can not compete with multinational companies, because modern agriculture is information intensive and it calls for more and more exposure to the latest technologies as well as information about the crop demand & market prospects. Even states like Punjab and Haryana are behind developed countries in agriculture production.

Past and Present

"Despite continuous emphasis on technology transaction through various extension services and community development programmes in the agriculture sector, the fruits of development have not been equally shared by the farming community. One important reason is communication failure in the sense that information related to technology up-gradation has not so far reached the farming community". (Tyagi & Sinha, 1999).

In the past, right from pre-independence efforts were made to disseminate information to the farming community for their overall betterment and for the first time F.L. Brayne (1920) introduced the concept of village level worker during Gurgaon project which is still continuing. Further, whatever approaches viz: Community approach Area approach, Target group approach, Employment approach, integrated rural development approach and participatory approach

were adopted, were confined to certain selected / adopted community, block, district, region or states and their results were expected to percolate automatically to the rest of the population. "The assessment of Communication linkages in Indian agriculture provide an insight that information channels to the ultimate beneficiary could not bear the desired fruit". (Tyagi & Sinha, 1999).

Idea of selection or adoption of State, district, block or village has made great loss to the Indian agriculture. There are the regions in our country which are saturated with the different development programmes through different agencies but there are areas / regions where still neither the government nor non-government organizations have registered their attendance. Way of selection or adoption may. be good for the purpose of testing research findings but certainly not for the dissemination of information and that too in liberalized economy.

Future

India is the 7th larger country in the world in terms of area. Its share in land resources is only 2% but it sustains 18% & 15% of the global human and livestock population. In changing perspectives world wide, Indian agriculture has to feed its own huge population first it has to maintain environmental sustainability and subsequently has to compete in the international market to keep the economic growth of the country steady and stable. The Government has opened the market globally, it has also the responsibility of safeguarding the interest of its farmers, first by increasing their purchasing power and then by making them capable competing in the international market, and for that it is indispensable to add something more to the present system of approach to information dissemination. Information should be available to the whole population to create such an atmosphere to change the farmers mindset to think & work scientifically which is a must for maintaining sustainability both on ecological and socio-economic fronts. "Exploitive agriculture offers great possibilities if carried out in a scientific way but poses great dangers if carried out with only an immediate profit motive. The emerging exploitive farming community in India should become aware of this. Intensive cultivation of land without conservation of soil fertility and soil structure would lead, ultimately, to the springing up of deserts. Irrigation without arrangements for drainage result in the soil getting alkaline

or saline. The indiscriminate use of pesticides, fungicides and herbicides could cause adverse changes in biological balance as well as lead to an increase in the incidence of cancer and other diseases through the toxic residues present in the grains or other edible parts. Unscientific tapping of underground water will lead to the rapid exhaustion of this wonderful capital resource left to us through ages of natural farming. The rapid replacement of numerous locally adopted varieties with one or two high yielding stains in large contiguous areas would result in the spread of serious diseases capable of wiping out entire crops. Therefore, the initiation of exploitive agriculture without a proper understanding of the various consequences of changes introduced into traditional agriculture; and without first building up a proper scientific and training base to sustain it, may only lead us, in the long run, into an era of agricultural disaster rather than one of agriculture prosperity." (M.S. Swaminathan, 1968).

Farmers are also to be given international exposure about what advanced technologies are being adopted in other developed and developing countries and all that can not be possible-until and unless the mass media takes interest in highlighting agriculture, the backbone of Indian economy, which does not get the importance it deserves.

Media Situation in India

1. Doordarshan

- TV Stations - 274
- Homes with TV Sets -45 million
- Primary viewers - 250 million
- Community viewing is popular
- Farm - based programmes
- Krishi Darshan I Choupal/ local Programme
- Krishi Katha
- Ankur
- Time - 250 minutes / week

II. Akashvani (All India Radio)

- Broadcasting Stations - 125
- Population Covered - 1000/0
- Farm - based Programmes
- Krishi Jagat
- Local Programmes

III. News Papers

- News Papers and periodicals - 35, 595
- Circulation of newspapers and periodicals -67 million
- Daily newspapers - 369 in 18 languages
- Circulation of dailies- 20 million (20% circulation in English for 2% English knowing population)

IV. Farm Magazines

- No. of farm magazines (Approx.) — 250

Total telecast broadcast time devoted is not sufficient and the type and quality of information is also not sufficient to cope with the circumstances because the complexity of the technology including its impact on nature's health as well as public health is generally ignored. Further, information is provided mostly on how to deal with increase in production, The matter of quality produce as well as how to make a business or profit out of it at the farmers level is absent so, in view of future exigencies following steps may be followed:

1. Farmers have to be kept abreast of changes in programmes and policies. Though about 8 years have passed since economic reforms were started, so far no efforts have been made to communicate the implecation of changes in policies, to the farmers. Development cannot take place unless those who participate in the process are socially, economically, technologically and politically literate". (Prof. Layle D. Lawrence, West Virginia university, USA - 1998)

2. Present system has to be modified drastically and it has to be honest enough in terms of its responsibility, accountability and commitment to win the peoples confidence, their participation, co-operation and cover more and more population with desirable outcomes, because credibility of the system, deliver informnation or provide services, counts much more at the grossroot level. " Failure of programmes may be due to many reasons but one which has been largely overlooked is the disparity between the way bureaucracies operate and the requirement of development programrnes which can mobilize the rural poor for sustained, effective self development and encourage innovative farmers for adopting hi-tech agriculture"(Dr. Ranjit Singh - 1998).

3. Telecast / Broadcast timings on Television / Radio are to be increased and quality of programmes is also to be upgraded with maximum load of information's. 'Technologies' - and ' Package of Practices' should be well screened and coded interms of their feasibility, adoptability and the cost effectiveness. Detailed guidelines may also be provided for supporting enterprises viz: Dairy, Piggery, fish farming, Poultry keeping, Goat / Sheep rearing, Rabbitry, Bee-Keeping Sericulture etc

4. According to a 1999 readership survey 42% of Indian villagers own television sets and the Govt. of India can afford to have a separate television channel on agriculture, like Discovery channel and the national Geographic channel to telecast only agriculture related programmes giving complete details and highlighting the benefits from different enterprises and practices. Simultaneously, efforts can also be made in radio computer and print media. A compute approach should be adopted.

5. Farmers have to be provided I educated with variety iof technologies so that they can choose what suits to them.

6. It is important to ensure that what is being highlighted by the media or other information sources, their inputs products and training facilities are available with concerned development departments, NGOs or in private.

7. Farmers should also be given a comprehensive idea of import and export of agriculture produce and tips to make the maximum benefit out of that.

8. An atmosphere of desired development in agriculture has to be created and inculcated among the farming community where farmers themselves can take the right decision and come forward to the available sources, agencies & systems to see their decision in reality. Sources, agencies & systems may or may not reach to the whole population but population may reach them if guided sufficiently & properly.

Conclusion

Information Revolution would be helpful to enhance the adoption of latest technologies to increase both quantity and quality production and also will benefit the rural educated unemployed youth struggling for jobs, so that the problem of unemployment could be minimized and by enriching their know how sustainability could be maintained both on ecological as well as socio- economic fronts. It will help to lead quality development in the field of agriculture.

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