W. P. : 345

## Working Paper



IIM WP-345



# INDIAN INSTITUTE OF MANAGEMENT AHMEDABAD

### AGRICULTURAL EXTENSION PROGRAMME: TOWARDS A FUTURE DIRECTION

By T.K. Moulik

W P N . 345 January 1981

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#### AGRICULTURAL TXTENSION PROGRAMME: TOWARDS A FUTURE DIRECTION

It is more than three decades that agricultural extension programme has been officially launched in India. Basically, the model and the content of the official extension programme was borrowed from America. Accordingly, the support system for the extension programme in terms of institutions, training programmes and organisations have been built over the years in an ever—expanding rate. However, there is hardly any significant change in the model and content of the original extension programme except in minor variations in emphasis, such as, Benor's TV system. It is perhaps high time to critically review the agricultural extension system in order to develop a programme relevant for the country's situations.

#### Existing Extension System: Limitations and constraints

Let us briefly examine the basic assumptions behind the American model of agricultural extension programme. There is no denying the fact that extension programme in America played a very significant role in agricultural development in that country. But it is needless to point out that the situation and context in which the programme played and has been playing such important role in America are widely different from that of India. Interestingly, this did not deter us from adopting the American model. For, it was tied up with American aid and therefore necessarily influenced by the political assumptions of such aid.

Benor, D and Harrison, J, Agricultural Extension, World Bank 1977.

As Galbraith makes it abundantly clear that the main propelling force behind the American aid was "the fear of Communism". It is this political origin of the error which misguided the whole programme of assistance to India aimed primarily to increase India's food production and supplies and to lessen its poverty. In fact, this overriding political assumption and attitude have, "fatally compromised its substance and therefore, its usefulness".

Armed with this political attitude, the whole extension programme seems to have been developed not from conceptually sound intellectual exercise but from mere convenience. America's assumption was very simplific and therefore totally naive as far as India was concerned. The poverty and lack of agricultural development in India was assumed to be the result of a shortage of capital and technology (in technical skill), simply because USA had both these factors of production in abundance. The remedy therefore followed the diagnosis. Having vaccine, the disease was diagnosed as cholera.

Such a therapy can suc eed only by accident, not by a sustained planned programme. Alra, there was no such major accident:

is hard to believe that the American experts and intellectuals were not able to understand the root cause of poverty and lack of agricultural development in India. A restructuring of the economic system in rural areas with effective agrarian reform was a pre-requisite for development.

<sup>2 .</sup>K. Galbraith, The Nature of Mass Poverty, Harvard University Press, Cambridge, 1979.

This was exactly what USA promoted (even by force in some cases) in Japan, South Korea and Taiwan, which the American experts often give example as demonstration model to prove Indian farmers' lack of innovativeness and entrepreneurship. But it is conveniently forgotten by these experts that the same reform measures were ruled out for India in their assumptions and easily labelled as "Communism". As a result, the archaic foundal system and its built—in socio—economic—political inequities was frozen indefinitely. It is on this highly inefficient societal structure, a superstructure of agricultural extension programme was imposed to deliver the goods through infusion of capital and technology. The programme had to suffer a crippling blow, only to be salvaged occasionally by further infusion of capital or an equally archaic Benor scheme.

Within this framework, the primary job of the extension programme was designed to be the transfer of modern agricultural technologies to the farmers. A large number of agricultural universities and training and research institutes were established to have trained extension manpower, obviously with same erroneous philosophy and often with irrelevant techniques. Simultaneously, a number of country-wide official development programmes were launched manned by a huge army of extension personnel.

with all these trained extension manpower and massively organised official programmes, India's agricultural development progressed in a snail's pace intil the arrival of oreen revolution in the late 1960's. Thanks largely to the discovery of the input-intensive "miracle seed' technology of high-yielding-varieties which made Indian agriculture moving fast belying all

expectations. In the process it shattered the myth once for all about Indian farmers' proverbial non-innovativeness and traditionalism-fatalism propagated by both Indian and American extension research scientists over the decades through millions of pages of research documents.

Looking back historically, therefore, one really starts wondering about the contribution of agricultural extension programme in the progress achieved in India's agricultural development and reduction of poverty. Be that as it may, it took us almost thirty years to understand that the nature and scope of the agricultural extension programme in India need a drastic change in order to cope with the dynamics of rural India.

But before analysing the required change in the system, it would be worth-while to examine the existing system. Essentially, the extension programme in the existing system is an agent for transferring technological knowledge and skil. and services between a fairly organised <u>c livery system</u> and a largely unorganized receiving system. In other words, the extension system

This can and should be an important topic for the extension research scientists at least to save their face and credibility. Instead of doing uselessly dysfunctional research, for example, on socio-psychological correlates of adoption of innovations a thorough research into the exact nature and extent of relative contribution of extension programme proportional to the cost in the rate of agricultural development in India during pre and post-green-revolution period, will be both methodologically challenging and academically satisfying.

A schematic representation of the broad features of the whole system in figure 1, however, does not reveal the full story. Apparently it looks perfect. But a close look clearly points out the basic weakness in the system in the sense that the efficiency of such a system solely depends on a very well developed inter-face between delivery and receiving systems, which in turn, depends largely on the matching bargaining power of the two systems. It does not require much research to understand the great mis-match between the existing two systems.

The delivery system, as it developed over the years, has been an organised system and that too largely in a bureaucratic framework. The output of he delivery system, therefore, follows the norms and interest of a highly killed manpower empowered with its organisational strengths and weaknesses. In the other hand, the receiving system has remained basically unorganised character. Sed by large numbers witchly dispersed in the rural areas and a widely heterogenous interest groups. A large punjabi farmer, for example, is basically interested in maximising his profit by commercially exploiting his own resources and output of the delivery system. His demand from the delivery system is primarily on those information and technologies which wimize his profit through efficient commercial management. Because of his resource position and politico-economic power, this large Punjabi farmer has better chance to get the delivery system respond to his articulated demand. Compare this with the situation of a small or marginal farmer in Bihar. With the deadly subsistence-constraints, this Bihariy farmer's aterest will be primarily to ensure minimum subsistence needs at a minimum

the small Bihari farmor is most unlikely to have his demand articulated and even if articulated, has very little chance to get the delivery system to respond readily. Because, it must not be overlooked that the extension agents providing the interface—linkage mechanism of transfer of technology and knowledge between the two systems are basically the product of the delivery system. The extension agent's interest and values are obviously shaped by the delivery system of which it is a product and part, unless otherwise, the receiving system develops a sufficient controlling procesure on the delivery system. With a large majority of the rural population under poverty lacking resources and organisations such controlling pressure from the receiving system on the delivery system cannot be obtained. As a result, for a large majority of the rural population, interface—linkage mechanism by agricultural extension programmes remain dysfunctional and ineffective.

This is not to suggest that the delivery system is unproductive and totally ineffective. Neither is it implied here that technology and capital, which the delivery system is designed to provide for the receiving system, are not essential for development and extension programme. Whether big or small farmers or landless labourers, technology and capital are crucially required and demanded by all. What is suggested here is the fact that so long as the interface between the two systems is not strengthened by organising the receiving system at a comparable level, the process of transfer of output of the delivery system through the extension agents will remain incomplete, partial and ineffective for a large part of the poor peasants. The failure

of the theory of percolation of benefits and demonstration effects in relation to a large majority of the poor peasants are the testimony of such phenomenon.

what then needs to be done? The foregoing analysis clearly indicates the absolute necessity for organising the receiving system in close consonance with the delivery system. In emphasising technology and capital of the delivery system, we seem to have blissfully neglected the other essential parameter of the requirement of the receiving system, and that is, the organisation of the peasants. It has to be understood very clearly that the leakages and ineffectiveness of the transfer mechanism through the extension system is largely due to the weak interface resulting from imbalances and incompatabilities between the delivery and receiving systems. Therefore, the priorities of roles and functions of the agricultural extension system need to be redesigned.

#### Future Extension System: Alternative Approach

The imbalances between the two systems can be corrected largely by concentrating efforts in organizing the rural population, that is, the receiving

It is not a mere coincidence that this aspect of extension system role has been greatly neglected by the extension experts and research scientists. It clearly reflects the wrong priorities and philosophies on the basis of which the whole training system of the extension specialists have so far been evolved. Apart from a passing remark about the farmers' organisation, there is hardly any serious research work done to document the process, mechanism and economics of rural organisation.

system. However, this is easier said than done. The rural population, particularly the rural poor can be meaningfully organised, at least to start with, around an activity which benefits them economically and in which the beneficiaries perceived risk is the bare minimum. This means the services and technical output of the delivery system should have to be transferred by the extension agents to the receiving rural population without leakages in the process and then the process need to be sustained over a period of time until such time the process becomes internalized by the groups of receivers who develops its own capabilities to maintain and monitor the flow. In other words, what is envisaged here is a complete shift in the role of the extension agents from a mere technology transfer per se to development of people's capabilities to organise, manage and monitor their affairs in effectively utilising existing resources and services of the delivery system.

It is doubtful whother such a complete shift in the roles of the existing extension system is possible within the bureaucratic framework. With this apprehension in mind the present author has suggested elsewhere alternative strategies. However, given the limitations and constraints of the existing extension system some feasible alternative roles can be identified which will facilitate the process of peoples' development and organisation of the receiving system.

It should be noted here that all the three countries, Taiwan, Japan, and South Korea, - whose models are touted as example of success stories, started with extension programme with two priority roles: organising the farmers (cooperatives) and transfer of technology in the same order of emphasis. In fact, at the present stage of development, the major functions of the extension agencies in these countries has been prioritized again into farmers organisations and business management, although for different reasons. See TK Moulik, Management of Small Rice Farmers' Cooperatives, FAD/ACDI, Washington 1979.

See,TK Moulik, "Stratogies of Implementation of Rural Development Programme in India", IFDA, Switzerland, 1979.

Having said that, let us try to explain the alternative roles of the extension system. Take, for example, the role of transferring information, one of the basic functions of the existing extension system. The fundamental hypothesis behind this role is the fact that the transfer of technology and capital can be effective only when the receivers understand, defend and enforce the delivery system in the form of development programmes and institutions owning or providing the technology and capital. For this to be the reality the receiving system must be informed. And, it is the transfer of information which has the potential seed to start the process of organising the receiving system.

As mentioned earlier, fortunately or unfortunately, there has been a large number of organised development programmes and institutions in India created over a period with specific developmental tasks. Given this plethora of institutions and programmes, the kind of information input needed or demanded by the receiving system can be broadly categorised as shown in figure 2.7

Among the three categories of information sought presently by the receiving system, the most important and consistent one is found to be the third one, that is, the ways and means to prevent leakages in obtaining technology,

The categories of information shown here are based on author's own experiences in his field work in the rural areas both in India and in other developing countries. In fact, the examples given in the subsequent pages are the ones collected by the author during his field work for the last decade.

capital and other services. This is particularly true for the large majority of the rural poor. To illustrate, Manguram could not get the Patwari's certificate for his one bigha of land in order to apply for SFDA loan because he could not bribe the Patwari. Madan Singh and others in a Bihar village refuse to apply for Bank loan because for every application they have to travel to the bank office at least 6 times and even after that if they are lucky to get loan sanctioned they receive only 40% of the loan amount and the other 60% of the loan amount is deducted for various 'service' charges throughout the channel. It is not surprising that they profer moneylendors even if the interest rate is 125% as against the bank's 4% underthe differential interest rate scheme. The MFAL scheme of animal husbandry suddenly stopped because the level of extortion by the certifying officer were getting out of hand. In our action programme of rural development, Matthai observed: "Hajari, Maniram and many others were approaching starvation and decided to start a new activity in order to get themselves out of their steady degeneration. Transport agencies will not accept their products despatched to metropolitan areas because of the sales tax and octroi problems. Lawyers are willing to inform these Rs 3-a-day villagers for Rs 300 and thereafter a regular fee. The villagers do not know what the effects will be, but they get apprehensive about the possibility of being worse off than before. They will, though they do not know it, be bound by the power of information and procedures. Kuppu got killed because he asserted his right to land allotted to him. He refused to let it be "sharecropped" by the big farmers. The veterinary officer of the block office do not have time to visit the village even when the whole flock of sheep and goat contacted some 'peculiar' diseases and are dying regularly.

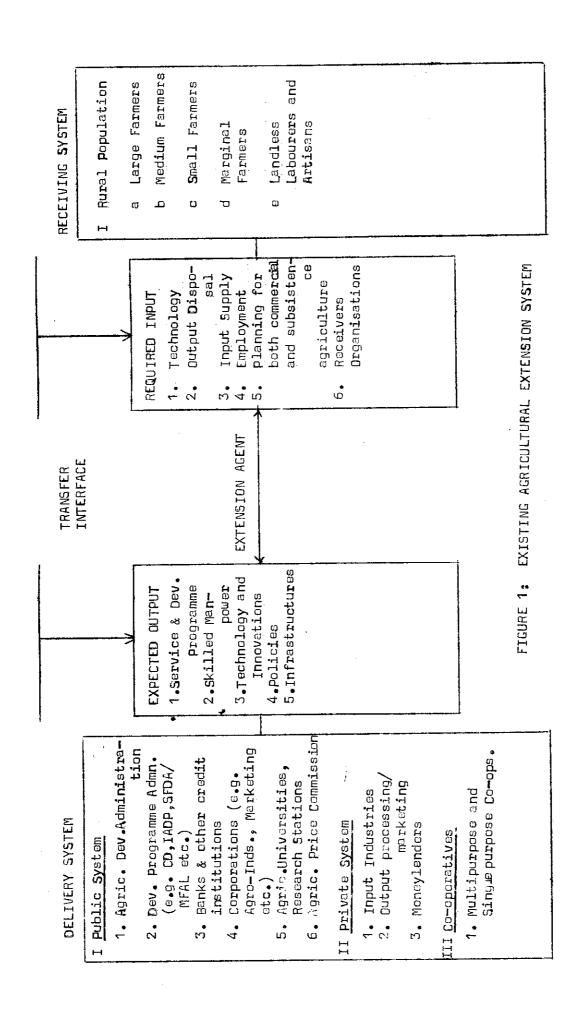
The purpose of foregoing illustrations is simply to emphasise the changing character of the need or demand of information in the rural areas. A few years back the most sought after information was about the technologies and sources of technology and capital. Now, the emphasis is how to get these without leakages. It must be reiterated here that this is not to undermine the importance of information regarding technologies and capital resources. But, it is perhaps safe to infer that the awareness about the existence and utility of the basic farming technologies are quite pervasive in rural India, particularly, after the green revolution. The important point is how to obtain it without leakages and risk from the supporting delivery system. As long as there is no new technological breakthrough, which comes rarely, it may not be necessary to devote existing level of extension time and rescurce on the transfer of technology information per se at a risk of loosing credibility and gaining distrust from a large part of the receiving system. On the other hand, providing information, quidance and diract linkages with the delivery system in the form of news, education and communication of factual and procedural data relating to their direct concern and demand as mentioned in the examples above, could easily be the optimally efficient use of extension resources.

If we accept this hypothesis, then it is not very difficult for us to relate it to the potentiality of organising the receiving system or the client groups. There can be, for example, few educated/literate members in a group who can be trained in filling the application forms for loan or writing petition to the proper authority of the delivery system. The veterinary officer can be made to visit the village to treat the 'unknown'

diseases of goat and sheep by submitting a joint petition to the BDO and perhaps by visiting the BDO's office in a group and even by paying the transport cost for the visit of the veterinary officer to the village. Purchase of inputs and marketing of outputs can be organised jointly.

The possibilities and potentialities are enormous, but equally time consuming. What it needs is a different orientation and priorities for the agricultural extension programme. It calls for a serious reorientation of the existing extension training/education programme and research. Reorientation may look unpalatable and dangerous to these who have developed vested interest in the existing system.

But failing reorientation, the consequences are sure to be disastrous. The choice to the extension specialists and policy makers is therefore between unpalatable and disaster.



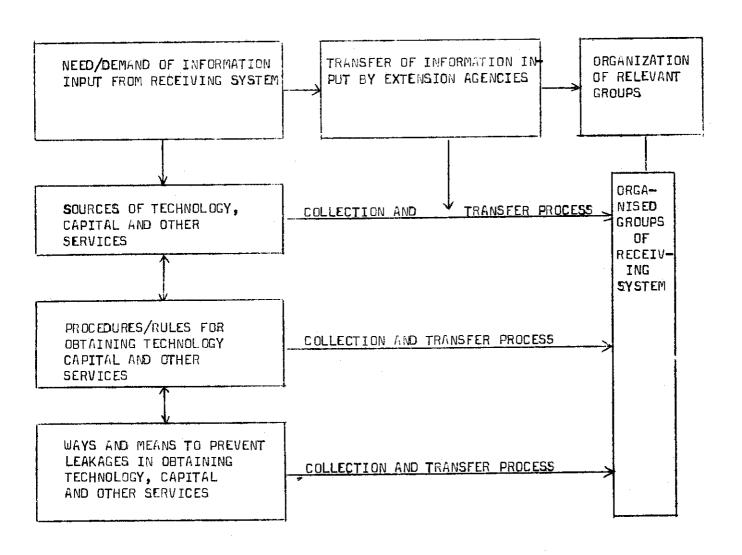


Figure 2: Process of Transfer of Information by the Extension System.