RESHAPING AGRICULTURAL EXTENSION SYSTEM R. Dwarakinath

University of Agricultural Sciences, Bangalore, held deliberations on Feb 17, 2011, on Reorienting Extension System in the Changing Agricultural Scenario. It is, indeed, high time that the Agricultural Extension System (AES) is revisited after nearly sixty years of its functioning. AES, as it is today, is an adopted version of the American extension system. In early 1950s, Pilot Extension Projects (sponsored by Ford Foundation) were initiated, along with Pilot Extension Training centers, Very soon, National Extension Service (NES) took over the activity, along with Community Organization and Rural Development programmes. With the establishment of the State Agricultural Universities (SAUs) in 1960s, based on the concept of Land-grant Universities of USA, several Extension Education Institutes (EEIs) were set up in the country, to ensure that the agricultural extension profession takes root in the country, both in its theory and practice. But, it appears that this goal never materialized fully. Thus, the extension system in the country today has emerged as a shapeless version of the original system

Agricultural Extension is really a system of intervention. It closely interacts with the farming social systems. Its business is to bring about changes in farming practices. In course of time, in the changed circumstances, this system has to reformulate its own goals and strategies, keeping its philosophy and principles in tact. Only then it can continue to serve the farming communities.

It is seen from this viewpoint that the work environment of the AES has changed so enormously over the years that the extension system itself has to reconsider its goals and its operational strategies. Here are some features of the changed situation.

The production base in farming is under stress

- 1. **Pressures on land is increasing** = Relentless increase in population Shrinking land-man ratio Changing life styles Competing demands on land
- 2. **Ecological deterioration unabated** = Depletion of vegetation Disappearing water bodies Bio degradations Sinking ground water
- 3. **Degenerating farming practices** = Over use of chemicals Low organic inputs -- Mono cropping trends Exhaustive cropping methods
- Alienation of future farmers = Growing urban attraction Education system does not expose rural dropouts to modern farming – Farming generally regarded as unremunerative drudgery – Farm youth turning away

The critical implications of this situation have to be taken note of. The farm population has grown vastly not only in its size but also in its aspirations, while the production base has shrunk rapidly both in per capita terms, and in quality. Large scale population shifts away from farming do not seem possible. Even in the face of pervasive urbanization of rural attitudes, intensifying farming and building employment opportunities on and around the farms seems to be the only option available. Towards this end, AES has to strive bringing science and technology to benefit farming.

Emerging factors that have extension implications

But, the prevailing agricultural policy seems to be stuck with a mind set focused on GR technologies, suitable mainly to irrigated areas and well-to-do farmers. There are some blind spots in the development vision as of now.

- # Farming today is highly externalized. In the past, farming was essentially a self-reliant family pursuit, with seed coming from previous harvest, manure from farm and home wastes and labour from the joint family. But, today farming and agriculture denote two different things while farming refers to the production activity on a plot of land, agriculture refers to farming plus a host of pro-production and post-production activities. Every farmer has to harness some of the backward and forward linkages. But, not all farmers are able to do so.
- # Farming continues to serve two basic national needs. It provides livelihood for the bulk of the population. Also, it produces surpluses to meet urban needs, industrial raw materials and export needs. But, **producing surpluses** is not the only goal. Social welfare is a basic responsibility. Hence, **ensuring livelihoods** requires due attention.
- # Farm sector is made up of two segments. The smaller irrigated segment is a more assured farming area. The rainfed area, with its fragile eco system, is the larger segment Development attention, so far, has been dominantly devoted to the **irrigated area**, while the **dry farming area** has been given cursory attention. These are two distinctly different production situations.
- # Farmers differ vastly in their adoption behaviuor. Farming communities are not homogenous. Based on their adoption traits, farmers may be seen in different categories. Elite Farmers, having better socio economic status, wider world view and notable political clout, seek opportunities to change and develop. They are the small, creamy layer of the farming community. Next to them are the Non-elite Farmers, a bulky segment, who are mainly inward-looking and conformist in behaviour. They are slow to change.
- # Technology requirements are not the same. Impressively productive and expensive technologies, as in the case of GR technologies, are suitable only for assured / irrigated areas, where farmers have resources as well as better managerial abilities. Evidently, in the case of dry farming, with resource farmers, this technology with purchased inputs will be appropriate. This, in fact, is the main reason why the expensive GR technologies did not go beyond the assured farming areas. It is the low risk, low cost technologies that would suit the dry farming areas.
- # Extension methodologies too will have to be different. GR technologies are generally seen as self-selling technologies, and farmers readily came forward to accept and adopt the new technologies, even when they were expensive. For, their profitability was quite visible. A top-down approach will work here. But, in the case of incremental technologies, farmers need to be convinced about their utility, and in many cases some amount of hand-holding may also be needed with the risk shy farmers. Here, it will necessarily be a need-based approach.

Nature of extension task that lies ahead

A common extension approach will not be appropriate for the future. Considering the kind of production situation available, kind of farmers involved and kind of opportunity available, the farm enterprise will be in two categories – **Commercial Farming** and **Livelihood Farming**.

Commercial Farming – These are assured farming situations, well connected to the support services in farming; farmers are forward-looking, with financial resilience and superior managerial abilities; and, with dependable market opportunities. Here, the need is **Specialised Extension Service.** Teams of extension/technical specialists must be based in the concerned development departments of Agriculture (Seed production), Horticulture (Fruits and vegetables), Animal Husbandry (Milk, eggs, broilers) and Sericulture (Cocoon production). The core members of these Teams must be from the concerned development agency, which is supported by the University of Agricultural Sciences. Private initiatives must also be encouraged in providing technical support to farmers, but they should be authorized, and held accountable, to the concerned development departments. This will be in the nature of 'paid for' extension service.

Livelihood Farming – For the foreseeable future, bulk of the farm population will continue in this category. They will be striving to earn a living in the fragile eco systems of rainfed farming. They will be mostly resource poor and risk shy. It is quite possible to bring greater stability into farming here, availing the vast body of dry farming technologies so far generated in the country. Since these are not generally information-seeking type, farm door delivery extension service will be necessary for sometime to come. What is required here is a sensitive and sympathetic extension team in the form of **General Extension Service**. However, the extension strategy adopted here must be different from the past. In the responding farming communities, interested farmers must be organized into SHG-like units for the extension agency to work with, as the entry points for their respective communities and neighbourhoods. Using participatory methodologies, it is possible build them up, in most cases, into vibrant community-based organizations (CBOs) as life-long farm development assets in the local areas. This will be in the nature of 'social welfare' extension service.

Role of SAUs in rebuilding the extension system

Over the years, the extension service has degenerated into a common sense service. It is no more a professional undertaking. It can be conceded that even as a common sense service it provides some benefit to farmers; but a lot more can be gained if it is run on professional lines. More over, it will be a lot more cost-effective, and for the same public resources available a larger farm population can be served.

For the most part, extension service today is seen as a policy delivery mechanism; as an 'errand boy.' To a certain extent, it is seen as a communication mechanism, ICT unit devoted farming. But, it is much more than this. In its professional form, it is Adult Education system, adjusted to the local conditions, culture and development goals, availing the technological resources available from time to time. Broadly, it is defined as **A non-formal system of adult education, relating useful, practical knowledge to the needs, problems and opportunities of farmers.** Of course, making farmers and farming communities better, is a part of the task.

SAU has a basic responsibility to work with the development agencies in agriculture development, and to orient, train and guide them in conducting extension work on professional lines. For this purpose, SAU itself has to refine its extension concepts and operations. In fact, through its KVKs, it should conduct illustrative extension work on the right lines.

An immediate task of the SAU is to initiate efforts to revisit the extension system to update the system in both its aspects – **Basics of Extension Education** and **Systematics of Extension Education**. Under Basics, the universal principles and procedures of Adult Education and Specialised Communication, in their unique combination for extension purposes must be reviewed and updated. It is to be noted that the Basics of Extension Education will be essentially common across the country.

Under Systematics Extension Education, the effort is adapt the system to local situations in terms of the status of farming, environmental conditions, cultural traits, farmers' attitudes and their abilities, and finally the needs, problems and opportunities of farmers. In this sense, Systematics of Extension Education will be unique to each farming region.