

programs with US assistance were started in India and Pakistan. The US spent a huge amount of \$50 million in launching these programs in 30 countries. However, almost 50 percent of that amount was earmarked for India, Pakistan, and Philippines. The World Bank provided more financial resources than any other donor for financing of such programs was more than that provided by all other donors. The World Bank support brought to developing countries in recognition of the importance of extension and development of many national extension systems (Gustafson, 1994).

“In the early 1950s, in Punjab-Pakistan, efforts were made to raise rural income through improved farming and cottage industries, to create a spirit of self-help, initiative, and cooperation among rural people, and to provide the required community services to rural areas. These were multipurpose Programs (Waseem, 1982)”. These programs were (1) Village Agricultural and Industrial Development (V-AID) Program, (2) Basic Democracy System, (3) Rural Works Program (RWP), (4) Integrated Rural Development Program (IRDP), (5) People Works Program (PWP). The present study is based on a review from previous studies. The focus of the study is to come up with concrete strategy for policy technology transfer program to enhance the agricultural productivity in the Punjab. The details of the programs are mentioned below:

Village Agricultural and Industrial Development (V-AID) Program

V-AID was Pakistan’s first formal attempt towards rural development (Mallah, 1997). It was started in 1952. It was a community development and extension services program designed to solve rural problems through the mobilization of the government resources and participation of the people. It served as the extension agency of all the nation-building departments at the village level. The Demonstration method was used to encourage farmers for adoption of improved varieties of crops, fertilizer, farming practices, and livestock production strategies (Chaudhry, 2002).

Working Procedure of V-AID Program

Talking on the working procedures of the V-AID program, Chaudhry (2002) described that the V-AID organization was put under the control of government officials, as development officers, supervisors and specialists to support and supervise the work of the front-line V-AID workers. In each district, 150-200 villages (140,000 people) were organized as a development area to be administered by a development officer, who was selected by the government and was held accountable to the Deputy Commissioner (DC) who was the district officer (Waseem, 1982 and Muhammad, 1994). The

Development Officer (DO) was supported by two supervisors drawn from different provincial departments to assist the villagers to do their self-help work. The major activities included in the V-AID program were improvement in crop and livestock production, building roads, bridges, culverts, schools, wells and drains, planting trees and removing health hazards (Malik, 1990).

Strengths of V-AID Program

V-AID program provided the most important link between the government organization and villagers in each department. The V-AID workers (VAW) those were an important element of this program served as a multipurpose extension agent. They were trained for one year in a government V-AID training institute (Waseem, (1982). The sole purpose of this program was tried to uplift the rural life standards in the country through education, organization, motivation, formation of village councils, modernization of agriculture, improvement in health facilities, building, roads, giving credit to farmers, arranging marketing and generating self-help (Malik, 1990 and Chaudhry, 2002).

Weaknesses of V-AID Program

Initially the program gained much popularity among the villagers and also met with some success particularly with regard to the awareness among the rural masses about self-help and self-reliance to solve their problems but later on it could not maintain its standard due to non-cooperation of other allied departments (Muhammad, 1994).

The basic reason for the failure of V-AID program was its weak structure. Among other reasons included lack of coordination between the line departments, top-down approach followed in the administrative decisions, lack of trained technical staff (Waseem, 1982 and Mallah, 1997). V-AID worker did not enjoy the confidence of the specialists, as they were multipurpose extension agents. Too much work was expected on a voluntary basis from the rural people without their empowerment at the village level (Malik, 1990 and Chaudhry, 2002).

Abolishment of V-AID Program

At last in 1962, the government of Pakistan decided to disband the V-AID program when it became apparent that the program was not making the desired progress (Malik, 1990). The decision was, however not based on any formal and systematic assessment of the V-AID program itself (Govt., of the Punjab, 1983 and Chaudhry, 2002).

The Basic Democracy System (BDS)

The BDS in Pakistan came in the scenario in 1959. It was designed to bring the elements of community and political development together, especially at the local level. The BDS was an attempt to involve the

people in social, economic, and political development (Waseem, 1982 and Chaudhry, 2002). The main objective of this system was to provide an opportunity to the rural people to participate in community development programs (Mallah, 1997).

Working Procedures of BDS

In this system, the government administrative and development tiers were organized into five levels. The lowest tier was union council (UC), which comprised 5-6 villages and a group of villages comprising 12-15 village councilors. On an average, such a union council covered a population of 8,000 people (Govt., of Pakistan, 1971). The councils carried out social and economic development work in their respective areas. The union councilors tried to solve the problems those were related to education, infrastructure, agriculture, and sanitation (Waseem, 1982 and Chaudhry, 2002).

Strengths and Weaknesses of BDS

The main strength of BDS was that it went a long way in developing awareness and local leadership among the rural masses (Chaudhry, 2002).

The major weaknesses of this system were that it failed to emphasize agricultural development and bring autonomy in the local government, there was inadequate local leadership and lack of adequate funds for the development (Waseem 1982 and Chaudhry, 2002). There were also other weaknesses that the bureaucracy stifled BDS, as they were not ready to lose their hold on the administration and encourage more active participation of the people's representative. There was a lack of adequate funds for development. of the Basic Democracy System as reported by Malik (1990).

Abolishment of BDS

Facing the same fate as its predecessor V-AID, the BDS was abolished by the Government of Pakistan in 1970 (Govt., of Pakistan, 1971).

Rural Works Program (RWP)

The RWP had its origins in a pilot project for community development undertaken by the late Akhter Hameed Khan as Director of the Pakistan Academy for Rural development (PARAD) in Comilla, Bangladesh (Waseem, 1982 and Malik 1990). It was launched in 1963 in West and East Pakistan. Rural Works Program attempted to provide maximum participation of the people in planning and executions development plans so that these programs could develop awareness and confidence among rural people to manage their own affairs without expecting much help from the government (Mallah, 1997 and Chaudhry, 2002). The objectives of this program were to enable rural communities to participate in the development efforts of the government and to improve their social and economic conditions; to provide increased

employment in rural areas on local projects not requiring large investments; to create infrastructure such as roads, bridges, irrigation channels, etc. in rural areas; to create an effective nucleus of planning and development at the local (union council) level; and to associate increasing segment of the population in the development effort (Waseem, 1982; Mallah, 1997 and Chaudhry,2002).

Working Procedures of RWP

This program was first conceived by Pakistan Academy for Rural Development, Comilla. It also strengthened purchasing power of the *rural masses* resulting in stimulation of the rural economy. The planning of development projects was the responsibility of the institution of local government at various levels, especially at the Thana (Police Station) and Union Council levels. It was launched at once in the whole country to strengthen the new institution of basic democracy and enable to local officials to undertake sizeable development program pertaining to their areas and also to evolve a satisfactory working procedure towards that end (Waseem, 1982 and Mallah, 1997).

The literature reviewed revealed that primarily the basic democracy institutions executed the program, the government with the close association exercised the overall administrative control and supervision of the program and guidance of concerned officials at all levels. In the provinces, the governments created directorate of projects for RWP in the departments of basic democracy and Local Government. The deputy commissioners (DCs) were designated as controlling officer to organize and supervise the execution of the program in the districts. The Sub-Divisional Officers (SDOs) were given control of the Union Councils and Tehsils (Sub- districts). The union council chairman, representing about 10,000 people, became important elected officials in the rural works program. The Govet., of Pakistan (1983) identified the discrepancies in terms of participation of people in the sense that RWP diluted greatly the participation of the people at the village level since most decisions were made at the union council level in collaboration with government officials.

Strengths and Weaknesses of RWP

Some of the strengths of this program were identified by Waseem, 1982; Mallah, 1997 and Chaudhry, 2002 as it led to the completion of over 60,000 projects in a variety of rural infrastructure and services; the average cost of these projects was much lower than those constructed during other programs. Providing jobs at the door step of the rural people and to reduce underemployment or seasonal unemployment in rural areas were also a significant aspect of this program. This program also created awareness among the

people about development needs and induced them to prepare plans.

Several flaws were reported by Waseem, 1982; Govt., of Pakistan, 1983; Mullah 1997 and Chaudhary, 2002 regarding the effectiveness of this program. The program did not permit participation of the villagers in preparation of plans and implementation of projects. The union council members, particularly their Chairmen, were not accountable to their voters at the local level. The use of RWP funds for political purposes during the presidential election of 1965 made a mockery of people's participation in RWP and adequate arrangements were not made for proper maintenance of the completed projects. There was a tendency to give more preference to a small-scale projects (schemes) over large-scale projects.

Abolishment of RWP

After its failure in 1972, a new strategy was conceived by the government with the name of People's works Program which was attempt to provide participation of the people in the planning and execution of developmental plans (Chaudhry, 2002).

The Integrated Rural Development Program (IRDP)

Pakistan went through a turbulent period of about three years from the beginning of 1969 to the end of 1971. The new government launched several programs of reform keeping with its populist platform that promised every necessity of life to the rural and urban poor. Of them, Integrated Rural Development Program (IRDP) took a comprehensive and systematic view of rural life. But it combined disparate postulates; mixes means and ends, contained theoretical inconsistencies and operational confusion. He further added that IRDP was a technocratic approach within the limits of traditional roles of the technocrats and of the rural life (Waseem, 1982 and Muhammad, 1994). The objectives of IRDP were to improve the welfare of rural people with the partnership of public officials and the intended beneficiaries (Govt. of Pakistan, 1983; Malik, 1990; and Mullah, 1997). The program had the four objectives, of them the main objective was to increase agricultural output by using modern methods, including farm planning and management, in small and medium size farms and providing credit, storage, transport and marketing facilities.

Working Procedures of IRDP

The focal point of IRDP was the Markaz (center of the activities of IRDP- an area comprising specific no. of villages) as an organizational and geographical concept. The markaz complex was established in a village or small town to serve as the growth point to be developed into an Agro-village-

and a place of assembly for the officials of all the line departments under one roof. The markaz as an area was expected to serve as an administrative unit of the local government in each district. Since there were no elected local councils, IRDP established multipurpose cooperative societies at the village level. The cooperative society at the village level and the Markaz committee at the Markaz level became the two tiers of the IRDP organization. The government officials, some newly recruited and others drawn from different provincial departments, were appointed as guardians of the two tiers of administration and management to provide guidance and necessary services (Waseem, 1982; Malik, 1990; Govt., of Pakistan, 1983; Mullah, 1997 and Chaudhry, 2002).

Strengths and Weaknesses of IRDP

The integration of nation-building departments which were involved in ameliorating the lot of farming communities, decentralization of their staff and services from the district and sub district level down to markaz (a group of union councils) level, and improvement in the farm information and delivery systems were the major strengths of this program (Waseem, 1982 and Govt., of Pakistan, 1983).

Chaudhry (2002) reported that among several weaknesses of IRDP, the major ones were the response of the line departments was very poor in terms of providing the services of competent officials and adequate facilities. The positive changes observed in agricultural methods such as use of inputs and growth of outputs could not be attributed to IRDP, new seeds, fertilizers and credit were spreading through numerous public organizations, agencies and private establishments.

Abolishment of IRDP

This program remained at pilot stage for about a decade and was not replicated (Govt., of Pakistan, 1983). This program was abolished in 1977 due to non-cooperative behavior of the concerned officials, and was merged into the Department of Local Government and turned into a routine bureaucratic agency (Waseem, 1982; Malik, 1990; and Chaudhry, 2002).

The Peoples Works Program (PWP)

The government launched the Peoples works program as part of its much-publicized land reforms and rural development programs in 1972 (Govt., of the Punjab, 1983). PWP was different from RWP in several aspects. It included both rural and urban areas concentrated on introducing infrastructure schemes with the wider participation of people (Mullah, 1997 and Chudhry, 2002). The major objectives of the program were to provide maximum participation to the people in planning and execution

of development plans so that these programmes could develop awareness and confidence among rural people to manage their own affairs without expecting much help from the government (Mallah, 1997 and Chaudhry, 2002).

Working Procedures of PWP

It was reported that in PWP both rural and urban areas were included. It was introduced on a large scale and involved a wider mix of people (groups), and was based on adhoc groups of public officials and local influential elite at village and district level (Govt., of the Punjab, 1983; Waseem, 1982; and Chaudhry, 2002). This program established an elaborated administrative structure for implementation of its activities. In most of the projects (schemes) 60 per cent of the wages were paid in cash and the rest in other forms. Voluntary work was paid 80 percent in any other form and 20 percent in cash (Mallah, 1997).

Strengths and weaknesses of PWP

This program only provided an attempt to ensure maximum participation of people in the planning and execution of development plans. But this attempt could not prove to be fruitful (Malik, 1990; Mallah, 1997; and Chaudhry, 2002).

The planning commission of Pakistan evaluated the PWP in 1975 and found several serious problems in its concept and implementation (Mallah, 1997 and Chaudhry 2002). It was allowed the members of the national and provincial assemblies to dominate the program and undermine the people's capacity for self-reliance by making them more dependent on the government. About 90 percent of the projects in PWP had no local participation. In most cases preferences were given to larger projects and their execution was done through contractors and the actual utilization of funds did not follow the priorities established in the original allocation.

Abolishment of Procedures of PWP

No exact date of its abolishment was found in any available related study except the evidence that the Peoples Works Program was abolished approximately after two to three years of its implementation, unfortunately due to withdrawal of governmental support. This program was named Peoples Works Program during mid- 1970s but has been renamed Rural Works Program since the late 70s (Govt., of Pakistan, 1988 and Mallah, 1997). The main criticism regarding the past rural development approaches were that all of above-mentioned rural development approaches followed top-down mode of dissemination of information and other related packages. However, an appointed team of rural development specialists by the Government of Pakistan when visited in the far flung areas of the province of Punjab and interviewed a field worker

about the failure of rural works development approach he said, "the main cause of failure was that we did not provide packages to the people based on their felt needs but people had to wait for the list of packages and benefits from the government". The other weaknesses of these approaches were the misuse of the funds and lack of participation by the local leaders in implementation and decision-making although the word "Participation" was the main theme of these approaches (Syed, 1991).

Barani Area Development Program

The Barani Area Development program was introduced in 1975 for the rain-fed areas of the province of the Punjab. The program aimed at total area development with major emphasis on agricultural development. In 1977, another organization, the Agency for Barani Area Development (ABAD) was created (Waseem, 1982). This new agency had the same operational territory with a wider sphere of responsibilities. The operational control of Barani Area Development Program was handed over to the newly created ABAD. Later, the idea of BADP was extended to other areas. However, it was curtailed to the crop-production aspects of agriculture in the rain-fed areas (Govt., of the Punjab, 1978). Various government officials bureaucratically controlled this program. This program had no concept of participation and its working and implementation was not based on the felt needs of the stake holders (Malik, 1990 and Mallah, 1997).

Traditional Agriculture Extension System

In 1961, the traditional agricultural extension system was introduced. It was the oldest system of agriculture extension in Pakistan, remained in operation until 1978. It remained in practice until the introduction of Training and Visit (T&V) System funded by the World Bank (Shah, 1990).

Mallah (1997) stated that this system was started in 1902 when the canal irrigation system was introduced in Indo-Pak sub-continent.

This system was basically one of 'Technology Transfer' from government to rural people. Thus it was as Top-Down Extension System (TDES). TDES believed that useful, practical and relevant technical information was available, and that the appropriate function of agriculture extension was to transfer the same to farmers (Axinn, 1985). The major objective was the provision of information to farmers for the diffusion of modern practices, especially in the introduction of new varieties, use of fertilizers, and crop protection measures. TDES mainly concentrated on the transfer of technology from top to the bottom (Govt., of Punjab, 1978; Waseem, 1982; Malik, 1990 and Mallah, 1997). Since the general extension approach was top-down oriented,

the decisions were generally made at the top by the authorities responsible for running the affairs of agricultural extension and implemented in the field through front line workers (Ali, 1991).

Strengths, weaknesses and Abolishment of Traditional Agriculture Extension System

Its strengths include the introduction of new varieties, use of fertilizers, and crop protection measures among farmers (Mallah, 1997 and Chaudhry, 2002). It had certain inherent weaknesses, which stood in the way of its effective functioning. This system had little impact on production and failed to develop an effective liaison between research and extension. Multifarious duties assigned to extension agents (Lodhi, 2003).

Training and Visit (T&V) Extension System

In Pakistan, with the realization of the weaknesses in the traditional agriculture extension system, a new system, namely the Training and Visit (T & V) system of extension (Benor and Harrison, 1977) was introduced initially in 5 districts of the Punjab and Sindh provinces of Pakistan in 1978 and 1979 respectively. In the Punjab province the project districts included Jehlum, Sargodha, Sheikhpura, Vehari and Rahim Yar Khan (Gondal, 1989). Mallah (1997) stated that Training & Visit (T&V) was introduced as a result of continuous failure of traditional agriculture extension system. Rehman (1992) also mentioned some pertinent information regarding the implementation of T&V system in Pakistan. According to him "in Pakistan, bureaucrats appreciated (T&V) because the pattern of internal communication in the department of agriculture was a symmetrical (geared to control rather than to create understanding) and top to bottom. Besides all this it was the effort of developed countries through various funding agencies, to help developing countries for introducing new models of agricultural extension to remedy the deficiencies caused by the traditional agriculture extension system. The philosophy of (T&V) system was based on triangular relationship between researchers, extension workers, and farmers. The major purpose was through massive transfer of technology, to bridge the gap between the modern technology evolved at research farms and that practiced by the majority of traditional farmers. Basically top-down mode of transfer of technology was used in this system. The objective of T&V system as a reform movement of conventional agricultural extension system was to attempt towards better extension services and improved levels of living in rural areas. The extension clients in this system were farmers. Extension workers focused their educational efforts on the contact farmers of their jurisdiction. The contact farmers were roughly 10 percent of the total

number of farmers in the jurisdiction of the front line extension worker (Khan et.al., 1984). The contact farmers were supposed to be opinion leaders and to function as volunteer extension agent in the community. The organization of this model was based on the total number of farm families that an extension worker could reasonably be expected to cover. Each extension worker worked according to fixed fortnightly schedule, which was known to farmers, extension workers, and supervisory staff. The extension worker received one day of training each week. He visited four groups of contact farmers (about 6 to 8 farmers in each group) the first week, and another four groups during the second week (Jalvi, 1981 and Khan, 1992).

Strengths and Weaknesses of T & V Extension System

Jalvi (1981) mentioned that this system had been able to regulate, improve and updated the existing agricultural extension setup. He appreciated the strength provided to existing weak extension, farmer, and research linkages through adaptive research component. Akhtar (1990) also demonstrated the advantages and effectiveness of T&V. He found that almost all the field assistants respondent were of the view that the T & V agriculture extension system were more effective than the traditional extension system. The extension field staff had somewhat better working efficiency in T&V as compared to the traditional agriculture extension system.

Like its predecessors, T & V had been plagued by poor performance (Khan et al., 1984). Khan, (1992) highlighted some of the weaknesses of this system. Among several weaknesses of this system salient were repetition of the same extension messages over a long time; improper selection of contact farmers, most of the contact farmers did not perform their roles as volunteer extension workers, most of the front-line extension workers were not competent to use group teaching methods; the selection of extension workers was based on factors other than competence; a vast majority of training officers had never taken even a single course in training. The T&V system is often regarded as too top-down oriented allowing information to flow from research organizations to the farming community via extension field staff (EFS) without sufficient sensitivity to local conditions (Howell, 1983). However, Howell further narrated that T&V, provided closer interaction with farmers, T&V tended to further institutionalize hierarchical tendencies already existing for top-down, centralized management (Antholt, 1990). Howell (1982) argued that the basic assumptions of T&V were wrong. The insufficient knowledge was the major constraint to

increase production. The system did not allow enough farmers participation in program planning (Lodhi and Khan, 1984).

The system was also criticized as too rigid in terms of fortnightly schedule of visits especially during the slack seasons (Lodhi and Khan, 1984; Antholt, 1990; and FAO, 1990). Its main focus was on procedural aspects rather than other essential aspects like the message and its dissemination (Hayward, 1989). While explaining the same aspect in Nepal's context, Sen (1992) argued that the fortnightly training had become a mere ritual as after a period of time the teaching materials became exhausted and the extension workers did not find much to teach after every two weeks' period.

T & V was often regarded as very expensive being too labor intensive involving many more extension workers than needed in the traditional agriculture system (Howell, 1982 b; Hornik, 1988; Antholt; 1990; and FAO, 1990) which a country like Pakistan may not be able to afford. Further more, this system did not make any differential impact on overall agricultural production in many countries (Hayward, 1989; and Antholt, 1990). In contrary to this view, ARW (1982) recognized that the application of T&V principles had a substantial contribution to make to agricultural development. Although the cost was higher than the traditional system, the output was also higher. Similarly a World Bank paper on the Kenyan experience also indicated that T&V was contributing to production, at least in the short run (Bindlish and Evenson, 1993). According to Benor et al (1984) the reasons for poor performance of the agricultural sector cannot easily be linked directly with extension.

Another criticism of T&V was that the system did not make effective use of mass media methods of communication (Lodhi and Khan, 1988) where as, mass media can facilitate development in these countries (Singhal and Rogers, 1989). A study conducted in Nepal, Sen (1992) explained that the farmers who were used as demonstrators or model farmers happened to be relatively rich, out spoken and elites of the community (Blum and Isaak, 1990). This biased of the system has also been mention by the Howell (1984) and Feder and Slade (1984). Probably that is why Rolling (1988) argued that the progressive farmers of the past have become the CFs in the T&V system. He regarded it as "old wine in new bottle". A study conducted in Andra Pradesh (India) shows a bias of EFS towards big farmers with more irrigation facilities in CFs' selection (Desai and Bidari, 1989). Feder and Slade (1984) also reported a bias regarding the selection of contact farmers in favor of tube well owners in India.

The contact farmer approach under T&V system was also criticized on the basis of strong likelihood of selfish behavior of CFs. They monopolized the extension advice and not let it go to other farmers (Howell, 1982). Perhaps that is why some critics argued that the system did not allow the opportunity to the small and needy farmers to take advantage of the system (Kashem, 1986) argued that the information flow from CFs to other farmers was outside the control of the T&V system. Contact farmers were poorly selected as reported quite often (Howell, 1983 and NIRD, 1983).

Rural youth and women were ignored as partners. The extension contact was often with elderly male household members whereas much of the farm work was undertaken by women and young members of the family (Howell, 1982). The system entirely focused on the information needs of farmers and took it for granted that all the needed inputs were available to them, which were not true (Rolling, 1988).

T&V system emphasized the communication of messages rather than making farmers understand these messages and improve their technical and managerial skills (Byerlee, 1988; and FAO, 1990). Whereas, Rolls (1984) said that our understanding of dissemination of knowledge as a social transaction had not been advanced by the T&V system.

At present the training and visit (T&V) system is not working in Pakistan. The government had a lot of pressure for the down sizing of the system (Govt., of the Punjab, 1999). The provincial government of the Punjab took initiative to change the system for saving the jobs of thousands of employees working in it. As there was fear that due to number of weaknesses in T&V, the system would collapse. Therefore, T & V system had to be replaced with the new one. Consequently, the Punjab government took an initiative, by making amendments in the setup of training & visit (T&V) system. The notification for the amendment was issued on September 9, 1999. The new system was not much different from the previous T & V system. It was still top-down, supply oriented, passive, and prove to heavy criticism (Govt., of the Punjab, 1999).

The objective of this change was to transfer power of decision making at local level. It was envisioned that powers will be transferred to the people through their local representatives and they will decide their own fate themselves (Govt., of Pakistan, 2001).

No consideration has yet been given to involve local farmers in planning extension activities and contributing budget share at district or sub-district level. A modified version of T&V system was implemented (Govt., of the Punjab, 1999).

The present agricultural extension system run by the governmental department of agriculture in the Punjab province involves extension work through Extension Field Schools (EFS). The EFSs are the farmers training sessions conducted by agricultural extension workers called trainers in the villager at the house or the farm of selected contact farmers. Department of agriculture extension wing in the Punjab is still, even after the implementation of the devolution plan, top-down, hierarchical, and autocratic in decision-making and management, inefficient, supply oriented rather than demand oriented and subject to heavy criticism. The budget is also under pressure and it is becoming more difficult for the government to meet its expenses.

Conclusions and Recommendations

Since the inception of this country, multipurpose extension methods, strategies, and programs in public sector have been implemented for bridging the yield gaps and enhancing agricultural production. But none of them provided any significant results due to the following reasons:

- a. Political instability in the country.
- b. Non-cooperative bureaucratic behavior and hurdles.
- c. Lack of trained extension staff.
- d. Lack of coordination in different govt. departments for the implementations of any program.
- e. In-efficient staff with vague or no objectives.
- f. Farmer community is not ready to accept these changes at grass root level due to low education level.
- g. Lack of motivation and dedication towards extension work on part of govt. officials.
- h. Misappropriation of govt. funds or resources.
- i. Lack of accountability and evaluation procedures.
- j. Lack of understanding of farmers' needs and desires.

It is also the sole responsibility of the extension staff to find ways and means and to rethink that what we need to do to assist the majority of poor farmers, so they learn how to deal with this ever-changing complex world where we live. Following are few suggestions to improve the agricultural extension programs:

- a. Divert the financial resources towards agricultural sector on war bases.
- b. Extension field staff must be accountable to farmers as well.
- c. Programs should also be started for women and youths (future farmers of Pakistan).
- d. Use variety of approaches to trained farmers.

- e. Extension field staff must also be trained and empower them to take immediate decisions in the field.
- f. Extension must reach to each individual by whatever possible method is available.
- g. Extension methods should be more supportive rather than mere implementation.
- h. Cooperation between extension organizations and other stakeholders for rural development.
- i. Policies should design from bottom to top not from top to bottom for the success of any extension program.
- j. Political leadership must need to give way to the recommendations of the researchers instead of their political interest for the development of rural community and to increase agricultural productivity.
- k. Land reforms are vital for the uplift of poor farmers in this country, so that every one could get fair share from the land.

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