



APPENDIX 12

Report on
Information Flows in Groundnut Based Cropping Systems in Andhra Pradesh
An Analysis of Farmers Perceptions
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Of the project on
Aflatoxin Contamination in Groundnut in Southern India;
Raising Awareness and Transferring and Disseminating Technologies to Reduce Aflatoxin
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Information Flows in Groundnut Based Cropping Systems in Andhra Pradesh An Analysis of Farmers Perceptions

One of the important prerequisites for development and transformation in the agriculture sector is dissemination of appropriate information and technologies and creating suitable awareness within the farming community. The Indian farming community has been provided with extensive information by the government extension agencies since the early 1960s. Yet very little of these massive doses of information is really absorbed and used by the community. The situation would be similar for a few more generations since large segments of the community youth do not have the wherewithal of assimilating such information given to them through a 'top-down' approach.

It is therefore essential to first 'visualize' the most effective channels of information flow and techniques of building awareness that are also most acceptable to, understood and internalized by the farming community. The next step should be relegated to developing appropriate tools of information and awareness through farmer participation techniques that will help narrow down the gap between 'supply and utilization' of information. In order to quickly disseminate information that can be easily understood and effectively put to use by the target groups and also to generate extensive awareness within the community it is necessary to organize information flows through easily effective and most accessible channels.

Purpose:

This study is initiated to trace out the most effective means of communicating to the farmers, the importance of undertaking aflatoxin reducing groundnut crop management practices and creating awareness among the farming community regarding the ill effects of consuming aflatoxins, under the DFID funded project on 'reducing aflatoxin levels in groundnut based foods and feeds in India'.

With help from participating NGOs, STAAD conducted focused group discussions with men and women farmers in order to understand the

1. Existing sources and channels of information flows available to farmers
2. Skills/techniques imparted/learnt through these channels
3. Accessibility and effectiveness of the information flows to different categories of farmers and gender differences
4. Farmers' perceptions on the roles of different agencies involved

The main purpose of the study is to identify strategies and methods for generating extensive awareness within the community on the ill effects of consuming aflatoxin through the food and feed chains and to disseminate technologies for reducing aflatoxin contamination during groundnut crop production, storage and marketing practices. It is envisaged that the study would be conducive for the development of information and awareness tools that would be most effective with the target groups.

Selection and Location of Villages:

The study is focused on the three districts of Andhra Pradesh in South India where the DFID funded project activities are going on at present. Information was collected from the villages where the project is actively involved in PVS (Participatory Varietal Selection) field trials with the farmers, for reduction of aflatoxin contamination in groundnuts. The entire process was carried out with the support and active participation of local NGOs – Rural Development Trust (RDT)/'Accion Fraternal'

(AF) in Anantapur district, 'Sahajeevan' in Pileru and Integrated Rural Development Trust (IRDT) in Mahaboobnagar district.

The PVS villages are -

- 1) In Anantapur district -
 - a) West Narsapuram in Singanamala mandal
 - b) Mukundapuram in Garladenni mandal and
 - c) Mallapuram in Kalyanadurgam mandal -
- 2) In Chittoor district - three hamlets of Kavalapalli gram panchayat in Pileru mandal –
 - a) Ontillu,
 - b) Bodinayunidoddi and
 - c) Maddelacheruvupalem, and
- 3) In Mahaboobnagar district – three villages in Balanagar mandal –
 - a) Rangareddygudem,
 - b) Kethireddypalli and
 - c) Peddayapalli

Background information on the Villages is provided in annexure 1.

Villages of Anantapur

The three villages selected for the PVS are located in three different mandals. The villages are located at about 7, 12 and 3 kms from their respective mandal headquarters, and travelling by local busses, are within 1 to 1½ hours reach from the major town of Anantapur which is also the district headquarters.

Villages of Pileru (Chittoor district)

While **Ontillu**, is located on a major trunk road between Pileru and Cuddapah – the district headquarters of neighbouring Cuddapah district, **Boddinayunidoddi** is about 1 km off the main road from Ontillu and **Meddalacheruvupalem** is about 3 kms off the main road from Ontillu further along the same route as Boddinayunidoddi.

Villages of Mahaboobnagar

Kethireddypalli, Rangareddygudem and Peddayapalli of Balanagar mandal are the three PVS villages of Mahaboobnagar and are located within 3 Kms from the mandal headquarters and about 15 – 18 kms from Jadcherla a major agricultural marketing center. These villages are highly accessible from even Hyderabad - the state headquarters as they are located just off the National Highway – No.7, leading to Bangalore.

Selection of Farmer Groups and Content of Focus Group Discussions

Based on the discussions with farmers and NGOs, farmers were classified into two wealth categories, the rich and the poor groups primarily based on their land holding size. Women farmers were treated as a separate group irrespective of their wealth status as most women in these villages actively work on the farm irrespective of their wealth category, and play an important role in implementing the technical information on the field.

Information on the wealth status of the farmers and their participation in self help group activities of their respective villages were obtained through local NGOs, self help groups etc. The rich farmers group essentially consisted of farmers of middle sized (5 to 10 acres) and large (above 10 acres) farm category, while the poor farmer groups consisted of small (2 to 5 acres) and marginal (less than 2 acres) farmers. Care was taken in selecting the women farmer groups to get the right mix as they were selected irrespective of their wealth categories. Thus from each location (district), three groups were selected for discussion across the project villages as per the availability of men and women farmers and based on the advice of the NGOs.

Information was elicited during the group meetings through question-answer sessions. Farmer groups were encouraged to interact on various aspects of the information flow scenario in order to -

- Obtain a list of all the formal and informal sources of information they are familiar with,
- The methods of information presentation / technique of information presentation / access used,
- Farmers perception of effectiveness and usefulness of -
 - Sources
 - Presentation technique
- Relevance of the information provided,
- Biases in information supply, accessibility,

The information gathered was collated for identifying the most effective channels and tools for providing information and awareness to farmers on the ill effects of consuming aflatoxins and the techniques of reducing aflatoxin contamination during their groundnut crop production, storage and marketing practices.

INFORMATION FLOWS SYSTEM

A complete list of the sources of information flows that were available to the farmers in all the three areas of study indicated that there were about 15 different types or sources of information available to the farmers. These 15 sources could be categorized into six different groups – 1) Farmers, 2) Media, 3) The Department of Agriculture, 4) The Agricultural University, 5) Dealers and traders and 6) NGOs

Farmers: Co-farmers and family members (senior members, men to women) are a major source of information to the farmers on various aspects of agricultural production.

Media: A large number of farmers are nowadays resorting to use of crop production information from the media sources such as the TV, the radio, newspapers, posters displayed in Agricultural department and Agricultural journals. Out of these the TV is emerging as for the most influential medium.

Dealers and traders: Dealers of Agricultural inputs and output traders are a major source of information to the farmers. This group is one of the most influential source of information as the farmers have highest levels of interaction with this group next to that of their co-farmers.

NGOs: Depending upon the intensity of activity by the local NGOs, farmers are now getting extensive and dependable information from some of the active and well rooted NGOs.

The Department of Agriculture: The Department of Agriculture through its various programs such as Janmabhoomi, Rythu Saddus and the enhanced activity through SHGs and Rythu Mitra groups have increased their contact levels with the farmers and hence have become an important source of information.

The Agricultural University: Due to the active participation of scientific staff of the agricultural universities in the departmental programs and other field based research projects in the recent past, interaction of the farmers with these specialists has increased providing valuable information.

1. Sources of Information

An analysis of the responses given by the farmers indicates that Farmers generally like to get information closest to their residences. It is clear from these responses that farmers first prefer to emulate the practices undertaken by successful predecessors in the family or other co-farmers. When such first hand experiences are not available for visual observation, farmers are increasingly seeking advice from local NGOs who actively participate in the village development activities. NGOs that provide the services of technical personnel with high levels of interaction are the ones that farmers tend to depend upon during critical periods and for specific problem situations.

Media sources such as the TV, radio and newspaper form another major information source for the educated and the affluent farmers. The vast majority of farmers who are either illiterate or those

who do not have access to the above sources generally depend upon the local fertilizer and pesticide dealers and traders for information.

S. No.	Information Source	PILERU			ANANTAPUR			MAHABOONNAGAR		
		Rich Farmers	Poor Farmers	Women Farmers	Rich Farmers	Poor Farmers	Women Farmers	Rich Farmers	Poor Farmers	Women Farmers
1.	Fore-fathers	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.	Co-farmers	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.	News papers	✓	✓		✓					
4.	Radio	✓	✓	✓	✓			✓	✓	
5.	Television	✓	✓	✓	✓	✓				
6.	Journals	✓	✓							
7.	Posters	✓	✓	✓						
8.	Fertilizer and pesticide shops/ dealers	✓	✓		✓	✓	✓	✓	✓	✓
9.	Oil Millers / Traders	✓	✓					✓	✓	✓
10.	Agricultural Department	✓	✓	✓	✓	✓	✓	✓	✓	✓
11.	NGO (Sahajeevan)	✓	✓	✓						
12.	NGO (RDT)				✓	✓	✓			
13.	Farmers' Agricultural Exhibition (Kissan mela)	✓	✓	✓	✓	✓	✓			
14.	District level Farmers' meetings (Rythu Sadhassu – Govt Program)	✓	✓	✓	✓	✓	✓			
15.	Farmers' Days (Rythu Dinotsavam - ANGRAU)	✓	✓	✓	✓	✓	✓			
16.	Field Day -	✓	✓	✓	✓	✓	✓	✓	✓	✓
17.	Janmabhoomi for agricultural programs (Govt. sponsored Peoples Participation Program)	✓	✓	✓	✓	✓	✓	✓	✓	✓

An Overview of the Source of Information Identified by Groundnut Farmers Chittoor (Pileru), Anantapur, Mahaboobnagar Districts of A.P.

Farmers in the study region indicated that they have been able to receive information from the agricultural department sources since a few years, due do the specific agriculture related Janmabhoomi programs (village level interaction with extension officials and experts) and when the farmers go to the agriculture department for subsidies on implements and inputs. However, farmers perceive that the agriculture department and the agricultural university are usually not important sources of information, despite the department's large extension network as interaction with the farmers by these agencies is rare and limited at village level.

Though the Agricultural University is extensively involved in the process of information supply to the farmers through the production of technical information required for broadcasting and publishing through the media such as the TV and the newspapers it relatively is less known to the farming community at large. Ideally, farmers would benefit extensively from the expertise of the university professionals through direct interaction, but such interaction is difficult to provide hence limited to a few targeted areas. Nevertheless, efforts are being made to provide the farmers through the rythu melas (farmers' fairs) and farmer field days, which are however rare and far apart and do not contribute much towards an extensive impact.

2. Access to Information

While it seems that the farmers have a large number of sources from where they can obtain information required for crop production activities, very few of these sources actually satisfy the farmers requirements in terms of content, understanding and assimilation for suitable for field

applications. Also, information provided through all these channels does not reach the farmers extensively. Very few farmers can access the information and use it for developing their crop production skills and techniques.

This is essentially due to the fact that either the accessibility to information is very low or the periodicity and timings of making information available to the farmers does not coincide with or suit the farmers' requirements. Most often than not, information provided through the audio visual media and the contact programs do not provide sufficient time for assimilation and an absorption of information by the farmers, and hence is lost to the farmers.

Farmers have expressed that getting information from co-farmers and family members is the most convenient, visually satisfying and an effective source since accessibility is very high and all aspects of crop production can be observed during actual crop production process and easily followed. For information on the performance of crop varieties, new varieties, pest and disease problems and their remedies and fertilizer application, farmers depend on the local traders and the field demonstrations conducted by the respective input manufacturers.

Farmers living in villages that are provided with the services of technically qualified personnel through NGO organizations seemed to have benefited the most. Information is available to the farmers not only on crop production and management aspects but also on a wide range of issues that have a bearing on their livelihood systems.

Ideally, farmers would like to have extensive interaction with the Agricultural department. They do realize that the Agricultural department does provide authenticated information on crop production techniques, various subsidies and many other types of support mechanisms. However, due to the low accessibility, as a consequence of the distance involved in reaching the offices, availability of concerned persons at the time of visit, the attitude of the personnel, availability of material and other such inconveniences keep the farmers away from the department.

Farmers have expressed satisfaction with the government sponsored programs such as the Janmabhoomi where access to the department officials was easy and information easily flowing but these programs are not held on a continuous basis. Farmers were also happy with the support provided by the government to the farmers clubs (Ryotumitra groups) and women SHGs where information could be accessed, discussed and exchanged much more easily, but this is a very recent phenomenon.

Farmers stated that while information supplied through the media (especially the TV) is accessible (in principle) for farming community at large and is now a days being used extensively, availability of TV and radio sets, the inconvenient broadcast timings, non-availability of program schedules, inability to follow the discussion / presentation, the inability to interact and the low levels of literacy among the farmers makes this source of information flow inaccessible to the poor and not very appealing. A few educated farmers are however benefiting to a certain extent from the technical and commercial information provided through newspapers and other agricultural journals.

Farmers have also stated that they are mostly happy with the levels of interaction provided by technical experts during special programs such as the district level farmers meetings (Rythu Sadassu) and farmers exhibitions (Kisan Melas) conducted by the agricultural department and the University, and the Agricultural University programs and other public programs conducted by the input dealers / manufactures.

3. Skills and Techniques

Over the years, farmers did manage to learn several new crop management techniques and skills through the multiple sources of information that they could get access to though it cannot be said that this was an exhaustive list and there is no guarantee that they were up to date with the latest technologies. Farmers have indicated that they have gained knowledge and skills concerning various aspects of groundnut crop production such as application of gypsum, MOP, alternate and

inter-cropping methods, weed control, new methods in pest and disease control, IPM, use of sprinkler and drip irrigation methods, through multiple channels of various sources of information.

It is interesting to note that while farmers have stated that they had accessibility problems with the Department of Agriculture, they agreed that most of the skills, knowledge and information learnt and/or acquired by them pertaining to their Agricultural and livelihoods systems have been provided by the Department of Agriculture and/or its personnel.

However, the role played by the extension officers of the NGOs, the TV programs and the newspapers and periodicals in providing extensive information, during the recent past, have been greatly acknowledged by the farmers. It is also essential to note here that farmers, during the discussions stated that they were greatly influenced by the information provided through product demonstrations conducted by the input companies.

Analyzing the responses of the farmers to the questions pertaining to the skills and techniques learnt by them through the various sources of information it is clearly seen that farmers do not have access to comprehensive information on the crop production activities. Most of the information is available and obtained only as disjointed pieces of information dealt for specific requirements during the cropping activity rather than a complete package for an entire season of crop production activity. It is only through activities of the agricultural extension officers of the NGOs who are available at times most convenient to the farmers that farmers are able to obtain pertinent information suitable for the cropping activities during the entire season.

LOCATION WISE ANALYSIS

It was observed in the study that there was not much variation between the locations pertaining to all the three aspects of information flows (sources of information, accessibility of information and skills and techniques transferred/learnt) analyzed in the study. However, a reflection of the capabilities of farmers in absorbing information and using it for their needs is clear from the fact that farmers across the three locations have not been able to give a complete list of all the sources of information available to them as well as the accessibility and the skills, techniques and other information they have learnt.

While farmers from Anantapur and Chittoor districts had expressed during the group discussions that TV, newspapers, district level farmers meetings and agricultural exhibitions have been good sources of information, farmers from Mahaboobnagar district could not recollect these sources to be worth mentioning during the discussions. Similarly farmers of Chittoor and Mahaboobnagar districts did not find information from journals and posters useful enough to be able to apply it in their farms. The fact that though all these sources are available to the farmers by and large in all the three locations, farmers in some locations were unable to recollect the skills and techniques presented through the various sources indicating the ad hoc and disjointed nature of information flows across locations.

Nevertheless, some interesting facts have been observed in the study. The role of the NGOs in providing information to the farmers seemed to have gained prominence as far as the study villages are concerned. Depending upon the activities of the NGO, farmers are increasingly depending upon the technical personnel of the NGOs for their developmental and livelihood activities. However location wise differences were noticed with regard to NGO services in terms of intensity and extent of coverage by the NGOs involved with the project.

On the other hand it was found that farmers of Chittoor district depend on Sahajeevan only for activities pertaining to agricultural loans from cooperative banks and other activities of the SHGs, while farmers of Mahaboobnagar district were not in a position to appreciate the activities of any NGO that could help them with their requirements of information and support. However, a very interesting feature expressed by the farmers Mahaboobnagar district is their reluctance to accept

information provided by oil millers and traders on the quality of varieties of groundnut that could fetch them higher market prices since they do not trust these millers and traders.

VARIATIONS AMONG SOCIAL GROUPS

As indicated earlier, the study is restricted to only three types of social groups - the rich farmer groups, the poor farmer groups and the women farmer groups since the other activities undertaken through the project were essentially based on similar groupings.

1. Sources of Information:

It was clear from the discussions with farmers that the information related to crop production activities and other livelihood issues did not percolate equally among the various social groups in the villages. Moreover, this variation was found to be uniform between the locations and across the villages. The rich farmers were always at an advantage in getting information from most of the sources. Information on government support for various aspects of Agricultural activities including subsidies were first known to the rich farmers due to the fact that they had all the parameters required for accessing information such as TV sets, linkages to the Agricultural department and universities, educated sufficiently and could afford to travel over the villages for accessing information.

Poor farmers on the other hand had limited means to access information and so were at a disadvantage. Majority of these farmers follow the rich farmers for accessing necessary information. However, activities such as those conducted by the NGOs, being mostly in favor of the poor and marginal farmers, had better reach in providing information to this group of farmers. The recent introduction of village based farmer associations such as 'Rythu Mitra' is providing some support to the poor farmer groups in this respect.

Women farmers were completely dependent on their spouses or other male members of the family/cofarmers for their information needs. It was difficult for the women farmers to openly exhibit the need for information on crop production activities. Introduction of women's self help groups such as the 'Dwcra' and 'Velugu' have been able to transform the situation to a certain extent.. Some women farmers have also been able to obtain information through 'Antwa' a training program for women in Agriculture in AP, particularly in Pileru area.

2. Access to Information:

The rich farmers not only have the infrastructure and the necessary personal traits for being able to access information, personnel of the Government departments, input manufactures and suppliers and other information suppliers generally tend to provide information first to this group of farmers since the others generally look up to this group as pioneers/risk bearers in adopting new technologies. Therefore, access to information, people and material inputs also become difficult to the poor farmers. Women farmers not only have to manage their fields but also manage the homes have a little time to spare for obtaining information. Their mobility is very low compared to either the rich or the poor male farmers. Inhibitions and restrictions in moving out of their areas of activity such as to the input dealers also affects the ability to access information when compared to the rich and poor farmers.

The thrust by the Government in providing information directly to the women farmers through SHGs has been a great help in accessing information by the women farmers. However, accessibility to information is always difficult for the poor and women farmers unless such information is provide closer to their areas of activity.

3. Skills and Techniques:

With growing importance to technical management of crop production activities due to impact of WTO based agreements on agriculture, information channels need to provide skills and technical knowledge not only to a few rich farmers but also to the entire human resource inputs involved in agricultural crop production activities. On the contrary, farmers have indicated that very few skills

are imparted to the less endowed farmers (ie., the poor and women farmer groups), while the entire information is first accessible to the rich farmers which slowly percolates to the other groups.

Accessibility to information is the key factor that is determining the extent of skills learnt by the different social groups. Two main factors inhibit this accessibility. The first and most important factor is the availability of technical personnel to the farmers. The second is lack of education. Poor and women farmers have stated that the agricultural extension machinery is available to them or does not accede to their requests for better interaction and support and so most of the technical support and subsidies provided by the various agencies go to the rich farmers, and hence most of them are in a position to implement any new skills for their agricultural requirements.

The information support available through the media is also not friendly to their conveniences since the broadcast timings are not convenient to the farm women and men. Women farmers have especially stated that most TV programs on agriculture are broadcasted when they are busy in either domestic work or on farm activities. Newspapers and journals have not even been mentioned as sources of skill development by the women and poor farmers in Mahaboobnagar and Ananthpur locations, while the poor farmers of Chittoor location had a passing mention.

In effect, while highly qualified information on a wide variety of cropping activities is available extensively on the media, the farming community is not able to develop the expected skills through this information source as most of it is lost to improper scheduling or lack of education or the fact the coverage too broad and quick for the farmers to comprehend and adopt.

Conclusions

Focus group discussions with men and women farmers and with the rich and the poor within the farming community shows that in terms of sheer numbers, there are numerous sources (fifteen and odd) from which farmers of the three study districts could avail information regarding agricultural production in general and groundnut crop production in particular. In other words, the information systems in Chittoor, Anantapur and Mahaboobnagar districts consists of several formal and informal channels that aim to educate the farmers with new knowledge, techniques and skills for adoption and improving crop productivity and their livelihoods.

Among the formal channels, various government extension programs turned out to be the largest single source with a wide coverage in terms of geographical area and structure hence constitutes the most important source of information for farmers. Farmers admitted this fact though at the same time they were extremely dissatisfied with this service due to lack of alternatives of that magnitude and scale of operations. Due to its long term existence and a state wide network of activities, it is considered as an inevitable source at present. What makes it most attractive also is the fact that it offers subsidies to farmers on various inputs, seeds and agricultural machinery. Despite this what dissatisfies the farmers most is the fact government extension services are highly inaccessible and lack follow-up support for farmers to be able to adapt as well as adopt technologies to their local conditions and to find solutions for their on-field problems.

A recent survey conducted by the Centre for Good Governance (CGG) in eight districts of Andhra Pradesh, covering a sample of 2,600 farmers found that only 20 percent of the sample preferred to seek advice from government extension officers or depend on counsel rendered (Times of India, 3rd October, 2004). According to this study, *“the main reasons for farmers’ low reliance on state extension officers are the non-availability of technical knowledge. More than 90 per cent of agriculture staff live in towns and cities, away from their place of work, and open their offices for just a few hours a day”*. This observation reinforces the need for a participatory study of the prevailing information flows, identify the gaps and evolve strategies to strengthen the system for imparting new agricultural knowledge to farmers.

Most influential among the private formal channels are the input dealers (fertilizer and pesticide dealers) and traders of the crop produce. Backed by fertilizer and pesticide companies their reach

to farmers is far and wide. Since they are the knowledge providers and lenders also, farmers rely heavily on their advice for on the spot information and problem solving. Farmers feel pressurized into following their advice due to their dependence on them despite the biases involved with the information flows and might even get cheated on the quality of the inputs.

The other sources from the formal private sector are few and mostly in the form of mass media such as exclusive agriculture programs on the local TV channels and radio, agriculture journals and newspaper articles which have limited access, i.e., to those farmers who can afford a TV or those who are 'sufficiently educated'. Farmers main complaint here is that the timing of the mass media programs are not convenient for them to listen to or watch them and their inability to follow the discussion / presentation.

One of the most effective means of getting to know existing / traditional management practices is what farmers learn from their elders and other co- farmers. Similarly, the easiest way to pick up information on the latest management practices is from their neighbors, friends and other progressive farmers in the neighborhood. An exception to this observation is found in the study villages of Mahaboobnagar district where the existing feudal relationships prevent small farmers from approaching large farmers due to an unspoken hierarchy existing between them. It is usually the rich who get to know things first and the new knowledge either never reaches the poor or it takes years for the information to percolate.

Irrespective of the location, in the entire information system, as far as access to information was concerned, the two common features that are most striking are –

- a) the poor farmers invariably have much less access to new information, knowledge and skills as compared to the rich and
- b) women farmers are worst placed.

The isolated exceptions are what women learn through the activities of their SHGs, women's exclusive 'janmaboomi programs' (disbanded at present) and exclusive women's training programs organized under the 'ANTWA' program (Dutch govt. funded) of the agriculture department. The scenario described above holds good for all the locations and the differences between locations relate to number of sources of information the farmers have access to rather than the quality of information that reaches them.

One emerging trend however is the role of local NGOs in providing extension and training in soil conservation, moisture conservation and crop management practices. The roles of RDT/Accion Fraterna and Sahajeevan had been clearly appreciated by the farmers of Anantapur and Pileru areas. But they constitute only a tiny fraction of total milieu of agricultural information system.

Recommendation

The information flow system in the study areas clearly shows that there are large gaps in the system due to which the poorer farming community in general as well as women as farmers are deprived of an access to directly learning about new information, knowledge and skills that are vital for raising the productivity as well as a good quality groundnut crop in all the three districts.

Against this background dissemination of aflatoxin reducing technologies requires a two-pronged strategy. Initially the outreach to groundnut farmers should be through the existing informal networks of NGOs and farmers. Government initiated as well as NGO initiated farmers' self help groups are an emerging phenomena where women's self help groups as well play an important role.

From the poverty perspective, majority of NGOs initiatives are towards the poor hence rendering the task of reaching the poor and women relatively easy. Two types of networks are possible here. Networking of farmers groups of several congruent villages across a given location and networks of NGOs in a given location linking up several SHGs to pass on the knowledge on aflatoxin reducing

technologies. In Anantapur district, RDT/Accion Fraterna not only covers scores of villages under its land development activities but also interacts with a large network of other NGOs in the district. Similar is the case with Sahajeevan.

While working through informal channels, the large network of government extension should be gradually brought into picture, utilizing the 'ryotu mitra' groups (farmers clubs) introduced by the government. The 'Panel' formed by the project for this purpose provides the launching pad to begin with as Andhra Pradesh government's department of agriculture is a member of the Panel. This should be complemented by spreading the word through the 'information tools' prepared by the project partners.

Among the emerging approaches to information flow systems to farmers, the concept of locale based information and communication technology (ICT) center is likely to be a most effective source that needs to be explored. A specially trained professional could be positioned at a focal point with computer based linkage to related research institution/s providing vital and need based information to the farmers and also provide instant solutions to field level problems. The center could also act as a single window through which sustainable support systems such as supply of good quality inputs, providing weather forecasting and out-sourcing of aflatoxin free groundnuts could be provided as integrated services to the farmers.
