

a. One alternative is to assign each responsibility to an administrative unit or units. Thus, each subject matter program would be an administrative unit, even though small. By the same token area-specific research would be assigned to units, a team for each area.

The technical support and liaison function could be assigned to one unit in the extension entity. It could also be assigned to several units, organized by subject matter or by geographic areas. In most cases the field extension agents are organized into units that would fit into a total system.

Size of country and thus size of the research and extension entities will be important factors in organization. In general, the simpler an organization can be the better. In small operations, for example, one unit could handle the technical liaison and support responsibility, without subdivisions. As size increases, sub-divisions will be needed.

b. Area Specific Research

On-farm research teams (FSR teams) is one way to organize area specific research. These teams can answer directly to the research director; they can answer to a technical director who is also responsible for subject matter research; or they could answer to an "area research deputy" who in turn answers to the director of research. In cases in which area-specific research is rather new and not well integrated into the program, a deputy director could be useful in helping the research entity and the teams learn and perform this new assignment of responsibility.

An alternative to on-farm research teams is the branch experiment station. This requires, however, (a) that the station adequately reflects the area's ecology, (b) that the researchers spend a great deal of time with farmers, and (c) that they work closely with extension.

There could be a combination of the two. Even on-farm research teams need a headquarters. In some countries in which on-farm research is emphasized, the branch station is known as a production center rather than an experiment station. If the branch station work is emphasized, there needs to be some on-farm work. If research personnel have trouble getting off the station, extension through demonstration and trials may be able to serve the function of keeping close contact with farmers.

Area-specific research personnel need to be to some degree extension workers, and this needs to be reflected in their job descriptions. Their major responsibility is to test and adapt technology, but that is so close to extension that it is difficult to tell what is research and what is extension. They need to be sensitive to farmer needs and to extension needs and above all not to worry about distinguishing research from extension.