

+To collaborate with extension and others who can help disseminate the tested, improved technology.

Area-specific research is often done by teams under a variety of names. These teams are key actors in identifying the factors limiting agricultural production and in putting the finish on technology. Much of their potential depends on how effective they can be in "conditioning" other elements in the national R/E System and even the international technology network (ITN). They must be related with the suppliers of technological alternatives and with those who can deliver their product.

Area-specific research deals in a range of commodities and problem areas, but its program orientation is geographic area and the farming systems of that area. It is responsible for the integrity of the research program by area needs and farming system criteria.

#### b. National Subject Matter Research

National subject matter research has two responsibilities.

+To support area-specific research, responding to problems and questions, dealing with both subject matter and research methodology. It is the first recourse of area-specific research personnel, its primary client.

+To provide new technological alternatives to area research teams and farmers, that is, to provide technical leadership, to come up with something beyond what area personnel are requesting--either by generating new technology or by importing it.

National subject matter research has country wide responsibility to maintain the subject matter integrity of the research program. Its personnel needs to be specialized by subject matter.

National subject matter research efforts can vary greatly in size. They can be substantial and assume responsibility for technology generation, i.e. generate the technological alternatives they offer the field teams. Or they can be very small, perhaps only one person, and work with the ITN to supply technological alternatives. Or they can be anywhere in between.

Size will be a function of the country's resources and its strategy in research development. Even in any one country, some programs could be small and others large. No matter what the scope of the program's work in generating its own new technology, it must still be responsible for keeping up with technology developments in the ITN. No country can afford not to keep in touch with the international technology network.