

Objectives of the Symposium

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This symposium, Sorghum in the Eighties, occurs almost to the day, 10 years after the symposium, Sorghum in the Seventies. Hopefully it will become a 10-year event enabling us as a group of scientists interested in sorghum to take account of what has happened and to better identify what are likely to be our priorities in the future.

The overall objective that we have, as agricultural scientists, is to increase human welfare. An effort has been made in organizing the symposium to include major areas of research, training, and development relevant to this basic objective. There is consideration of varietal and hybrid development, factors that limit production, institutional requirements, quality and nutrition, and socioeconomic considerations. In all of these, there are applied and more basic aspects of importance and for which long-term funding is essential.

An objective of the symposium is to outline the state of the art at the end of the seventies and from this experience identify priorities for the eighties. This is important to what we do and how we work together to do it. An effort has been made to bring together at this meeting scientists from many countries and many disciplines so that from their varied backgrounds there will be a useful interaction and the development and strengthening of relationships.

The Need

The problems of population growth and increase in food production will be detailed in this symposium. That the rate of population growth exceeds that of production (IADS 1980) is of concern. The

projections of required increased food production by 1990, the 10-year period that we are considering, make us realize the seriousness of the problem that we as sorghum scientists have to face (Ryan 1981). An objective of this symposium is to help us to better respond to this urgent need.

The Clientele to Whom Our Objectives Must be Relevant

Our basic objective is to make improvements in sorghum production. A major thrust is to the poorest of farmers working in harsh environments with little or no resource base; another thrust is in areas where the environment is good but a technical, more productive agriculture, is yet to develop; yet another thrust is in areas where agriculture is already highly technical and a community of necessary goods and services exists. We should recognize that the farmer, in each instance, is an important end point and as scientists we cannot say that our job is finished when the technology is developed. We must help ensure that our findings assist in solving the production problem in the farmers' field. The important concept is change—we need the imagination to see beyond what is; we must be careful not to lock the farmer into his tradition being ourselves convinced that he has no base for change; we must be prepared to exploit opportunities that begin to make a change and not over-generalize feelings that we must meet all needs simultaneously. One change will bring another. Our community of developments, experiences, and capabilities are mutually supporting and an objective of this symposium is for us to better see how they can be made more relevant to the farmer.

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Cooperation

Most of the problems that we face are complex and can be most effectively solved by cross discipline and cross institutional cooperation. Some institutions have the capability to resolve the more basic issues on which the applied is generated. Others can adapt technology to local needs and identify problems requiring a more basic understanding. Communication is a problem to which we should give consideration. There is a need to develop priorities; and to share ideas, materials, resources, and recognition. This symposium provides an opportunity to evaluate and improve these interactions.

I have long maintained that our germplasm belongs to everyone. Some collect and preserve it, but for the good of all. Every nation interested in sorghum improvement has received seeds from outside and benefited—it is for the common good that our germplasm flows easily. This symposium should endorse attitudes and practices that encourage seed exchange and the continuous need to monitor quarantine requirements to be effective, but not unnecessarily restrictive.

It is not for us just to give priority to our research but to give thought to the speed of accomplishment. Time is important if we are to meet the challenge, and consideration of the rate of accomplishment should figure in our objectives. With limited resources we must balance them across research, development, training, and infrastructure requirements. These are not static needs, and the balance between them will change with time and differ with location. A function of this symposium can be to help gain a perspective among these aspects.

International and National Program Relationships

I have long felt that the development of a variety or hybrid and a package of management practices is relatively an easier part of our task. Midge followed the introduction of an early maturing hybrid and damaged later locals in northern Maharashtra. Fifteen years ago one could rarely find charcoal rot in India—now it is a problem. *Striga* is increasing in severity where the new hybrids are sown, and the entomologists are raising concern about the seriousness of army-

worm in India in the eighties. The change in variety and its management brings on an array of problems requiring a fairly sophisticated research capability to solve.

Ultimately an objective is for each sorghum growing country in the world to have its own research capability. Today, some do and many do not. International agencies can assist by generating useful materials and techniques and by placing scientists with the necessary range of skills in strategic locations to adapt and generate new materials and techniques for different environments. Training of different kinds is imperative to success. There is no substitute for a country having adequate research capability—the function of international agencies is to hasten the day when this exists. Countries must look carefully at the deployment of their scientists and develop conditions encouraging their creative capability. This interrelationship is an important issue and will continue to be into the eighties and deserves our consideration.

Technology is not a cure-all. It must be applied if it is to be meaningful. Government policies can encourage or discourage new technology; and expertise within international agencies can be relevant to the development of national policies. Improvement in sorghum production is no exception. I hope that we hear more about this during the coming week.

This symposium is diverse in structure in an attempt to allow us to respond to many relevant facets. An attempt has been made to bring people together from different backgrounds and experiences. We hope that you will all contribute effectively to the objectives of this symposium.

References

- IADS. 1980. Agricultural development indicators: a statistical handbook. Washington, D.C., USA: IADS.
- RYAN, J. G. 1981. Demand projections for 10 year plan. ICRISAT. Aug 3 1981. Inter Office Memorandum.