

Extension in Agrometeorology through the right type of intermediaries

Many years ago, when agricultural sciences were introduced in Iran, the newly educated agricultural engineers tried to transmit their knowledge and skills to farmers who learned farming from their fathers and grandfathers. They thought this would be easy. These farmers, however, not only didn't listen, but also didn't let the new technology come into their farms. They believed the power of their own hands more than beautiful words of young engineers with books. This new generation planned a better future for the farmers, in which manpower and cowpower would be replaced by machines, a world with more crop per drop. But an actual relationship between farmers and scientists did not form until a group of agricultural engineers communicated with ethnic farmers in a relationship of equity and equality, by having them participating in creating special connections between different kinds of knowledge. This group was called **agricultural extension engineers**.

Not far from agronomists and agricultural research centers, there are environmental scientists who work on increasing crop yields and reducing yield damages. They are trying to discover and analyze effects of climate and weather on the growth and development of for example field crops or fruit trees. They provide valuable information about the variation of meteorological parameters and forecast weather and climate conditions into the future. They dedicate this information to the users of this kind of data. These scientists are **agrometeorologists** and their science is called **agrometeorology**. In most countries in transition it is a new science.

It now dramatically appears as if agrometeorology is going to be like the modern agriculture previously described. Farmers don't understand it and they refuse to accept it as a practical and useful science. We see the story of agriculture repeated for agrometeorology in a different form. NMHSs provide (micro)climate analyses for an area and they issue weather forecasts. In some Services there is even a special Department to provide the necessary information for farm activities and management. However, when one takes a general look, it is immediately understood that only very few of these products are useful and accessible to farmers. Some of the main reasons are in my view as follows:

- most farmers don't know agrometeorology and its products and services;
- many (agro)meteorological products/services are not understandable for farmers, because of their complexity;
- agrometeorologists don't know the actual meteorological information/services needed by farmers;
- farmers getting to know meteorology don't believe in the usefulness of agrometeorological information for increasing and protecting yields;
- because of lack of suitable, fast and extensive transmission methods, useful information is received by the potential users with too much delay; even the most accurate data when expired will not be useful for anybody.

In this situation an **extension approach** could help agrometeorology and we could form a new field of application named **extension agrometeorology**. These intermediaries would be called **agricultural extension meteorologists or extension agrometeorologists**. They should have good knowledge of agriculture, meteorology, climatology, farming systems and extension. On one hand they must be familiar with products from NMHSs and agrometeorological services and on the other hand they must know the (agro)meteorological needs of farmers. They must have ability to be on good relational terms with farmers and other agricultural extension agents, moreover they should be familiar with the right extensional methods in order to exchange information mutually. Undoubtedly establishment of this field of application would be a turning point in agrometeorology, agriculture and extension.

Herewith I invite members of INSAM to share their knowledge, experience and comments to this regard with me in this new Agromet Market Place. I look forward to hearing from you.

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[Edited by Kees Stigter]