ABSTRACT

In most countries, agricultural research (AR), institutions of higher education in agriculture (HEA), and agricultural advisory services (AAS) function as separate agencies. So far, in most countries, AR, HEA, and AAS have not had a common vision for rural development. In Finland, domination of agricultural production in Finland has led to a lack of effort to develop other economically viable enterprises for rural areas. The Regional Development Act 1993 is characterized by a shift from a project approach to a program-based, integrated territorial policy. The goal of the rural policy is to revitalize the countryside. An efficient higher education program is needed to produce qualified researchers to tackle rural problems; a well-functioning rural advisory system is needed to transfer the results for the benefit of rural areas. Universities can provide a multidisciplinary approach to combine conflicting values into a framework in action. The final products of rural development activities must be economically competitive enterprises, clean rivers and ground water, high quality food products, diversified livelihood structure, and the well-being of rural people. The main challenge is to transform, through education and training, agricultural producers into rural entrepreneurs. Close cooperation is needed among AAS, AR, and HEA to develop and implement a joint planning process for applied research and extension programs. (YLB)
Harri Westermarck

AR, HEA and AAS in RURAL DEVELOPMENT PROJECTS - BENCHMARKING TOWARDS THE BEST PROCESSES

1. Summary

In most countries Agricultural Research (AR), Institutions of Higher Education in Agriculture, and Agricultural Advisory Services (AAS) function as separate agencies. Basic research provides raw materials and technologies, education develops theories which extension and consultation can use in helping clients to solve their problems. Even if the functional division of labor between these agencies is not any more very clear only by working synergistically together they can produce the desired behavioral change and economic well being both for individuals and rural communities.

When directors of extension, research, and higher education have been meeting every 3-4 years in OECD headquarters in Paris there has been good opportunities to benchmark and learn from different alliances between these three agencies in 29 member countries. No best global system can be delineated but there has been successes and failures in each member country which could be transferred on conceptual level from one culture to another.

The final product of rural development must be economically competitive enterprizes, clean rivers and ground water, high quality food products, diversified livelihood structure, and happy rural people. So far in most countries AR, HEA, and AAS have not had a common vision for such a rural development.

In this paper an attempt is made to build processes on conceptual level of these three functions in dealing with rural development. A special interest is shown to Finland where Advisory and Extension System is celebrating its bicentennial anniversary this year. Finland has 5 mill. inhabitants and 60,000 farms which in average comprise 40 acres of cultivated land and 90 acres of forest.


2) Dr. Harri Westermarck has been Professor and Director for Centre for Extension Education at University of Helsinki Finland since 1970 when the centre was established with a grant from W.K.Kellogg Foundation, Battle Creek, Michigan. He studied Rural Sociology and Extension Education at Iowa State University in 1968-1970. He has served over 20 years as a consultant at OECD meetings dealing with extension, higher education in agriculture and agricultural research.

3) Organization for Economic Cooperation and Development (OECD) was formed after World War II in Europe by those industrialized countries which received so called Marshall help from the U.S. Later the U.S., Canada, Japan, Australia, and New Zealand joined the organization. OECD has in 1997 29 member countries.
2. Definition of rural development

The goals of rural development are inseparable from the definition of rural development. Rural development is a comprehensive process involving the economic, social, and physical realms of rural life (Future Directions in Rural Development Policy 1990). Each realm affects and in turn is affected by the others. Rural Development is a process that enhances an area's productive capacity in a sustainable way. By improving the ability of a rural area and its people to adapt to changing conditions the process of development leads to improvements in the relative standard of living of current and future residents. Development differs from growth which represents an expanded level of economic activity but not necessarily an increase in productive capacity.

Rural Development is important to rural and urban citizens alike. Indeed, rural development is important for the economic efficiency and security of any country. In the increasingly competitive global economy no country can afford to undersue the valuable natural, human, environmental, and economic resources in rural area. Equity is also an issue: Equal opportunity to basic goods and services and to economic prosperity should be a fundamental precept of the national heritage (Commission report).

To make the most effective use of limited rural development resources the players in rural development - government, private, non-profit organizations must form effective alliances to coordinate their efforts and collaborate in joint activities. The government should establish a policy process that can develop a comprehensive approach to rural development. That process must assure a holistic approach to rural development and establish effective communication and collaboration among other potential partners e.g. agricultural research institutions, extension and advisory services and universities and colleges of agricultural and related sciences. So far in most OECD countries these agencies have not had a common vision of rural development.

Rural development involves a wide range of factors and values which combine in a complex way. If the various programs of a comprehensive rural development policy are to deal with these values efficiently and effectively, the policy must have strategies that weigh the importance of these factors for individuals and communities, build on local strengths and develop realistic goals. E.g. economic development and environmental protection both represent important values. In the long run these values complement each other. A good quality environment is essential to continued development.

3. Situation in Finland

3.1. New challenges for the value chain of food stuff

Farmers in Finland were before European Union membership more or less relieved from marketing problems as guarantee prices on milk, grain, meat, and eggs were set through annual negotiations with the Government.
All OECD countries have supported their agriculture but in Finland the support was especially high due to social policy, protection, and employment reasons. However, according to PSE Japan, Switzerland, and Norway have supported their agriculture even more than Finland. The agro-food industry had no need to develop niche products but could export the excess production in bulk to the world market which already was filled with similar products. The hegemony of agricultural production dominated too long due to political and economic reasons and not enough effort was made to develop other economically viable enterprises for rural areas. Also the agricultural research, higher education, and extension concentrated mainly on the production problematics and not on wider rural economic and social issues. The values of the society for a viable countryside, those of the consumers and of the environment were of minor importance to the farmers up to the 1980's.

It should be of vital importance to delineate specific roles of research, extension and education in these new value chains. In Finland University of Helsinki has established two rural Research and Training Centres outside Helsinki; one in West Finland and one in East Finland. In the development programs for entrepreneurs who market value added small scale food products university based research has been of major importance in gathering marketing signals for the products and university based training in teaching marketing philosophy and practices. University centers have also given multidisciplinary training for agro-ecological producers in collaboration with a government owned research station situated close to the university training center. The value chain of these products is still incomplete. The challenge in training entrepreneurs for agroecological production system is great because many of these persons have no experience in farming before starting their businesses.

Picture 1
3.2. Agricultural versus rural policy?

The Finnish rural policy, although it can be dated back to the 1970’s, reached a new phase in 1993, when the Regional Development Act was issued. The main ministries involved in the preparation of the Act were the Ministry of the Interior and the Ministry of Agriculture and Forestry. At the national level the new policy is characterized by a shift from a project approach to a programme-based, integrated territorial policy. In theory a large component of this policy is the decentralisation toward regions and municipalities.

The purpose and objectives of the Finnish rural policy are:

- Rural policy covers all the objectives and measures designed to ameliorate rural conditions and improve the situation of rural areas in society and in the regional structure.
- The goal of rural policy is to revitalise the countryside. The objectives are to alleviate structural problems, improve rural livelihoods and services, strengthen the viability of rural communities, enhance the competitiveness of rural areas and increase their attraction as places to live and as locations for enterprises.

The coordination group for Rural Policy is the body responsible for planning and implementing rural policy. It is a forum of nine ministries, three interest groups and two expert organisations, all concerned with various rural issues. The Committee is chaired by the Ministry of Agriculture and Forestry.

The Rural Programme is a major component of the new Finnish regional policy. The specific objectives of the programme are to diversify production especially in agricultural areas; to safeguard basic services, particularly in remote areas and to improve income opportunities.

In the OECD Review of Rural Policy in Finland, a great emphasis is laid on the part of infrastructure related to human capital. This type of infrastructure relates to all establishments and measures, which contribute to the regional economy’s capacity to innovate and adapt. It includes vocational training and universities, further education for the employed or unemployed and the institutions devoted to the transfer of knowledge such as technology and innovation counselling. According to the Review, while the importance of production related infrastructure is decreasing, human capital related infrastructure becomes more and more relevant for current economies.

The Ministry of Agriculture and Forestry, in its research policy paper for the years 1995-2000 stresses the need of improving the transfer and application of knowledge as the source of new business and enterprising. Research is in the beginning of an innovation process and does not result in a business enterprise or a change in the attitudes of farmers without the effective functioning of the whole innovation chain.
An efficient higher education program is needed to produce qualified researchers to tackle rural problems, which at the present situation are more economic and marketing related than biological, and a well functioning rural advisory system which can be directed to transfer the results for the benefit of the rural areas.

Picture 2

In trying to develop rural areas we need economic, normative, and informative steering systems. Therefore no agent can master all the knowledge needed to develop rural areas. In trying to develop a new vital rural economy as well as the livelihood and production we need knowledge from many disciplines, e.g. food economics, technology, and marketing economics. Universities can provide such a multidisciplinary approach. The university representing all kinds of disciplines can provide a multidisciplinary approach to understand and combine the different conflicting values into a meaningful and manipulative framework in action. For steering the value chain (production, management, and marketing) we also need an understanding of many disciplines.

4. Process management - an identification of an opportunity

Results are the outcomes produced by the sum of all the activities and behaviors that go with the organization. Results can be measured in a variety of ways. The way an organization chooses to measure its performance will determine its ability to stay on track and its ability to develop support systems and policies that are in line with the values. Organizational alignment means creating a culture in which strategies, values and day-to-day behaviors are consistent and compatible (Tosti & Jackson 1994). However, sustained success depends on the people of an organization - because it is people who determine the way its products and services are delivered.
In Finland there does not exist an alignment between agencies of research, extension, and education. The three agencies work separately; AR under the Ministry of Agriculture, HEA under the Ministry of Education and AAS is the farmers' own non-profit organization which gets one third of its costs covered by the government. There does not exist a true "learning organization" between AAS, HEA, and AR where agencies could in a climate of openness and trust share their ideas and split their minds. The value of learning should lie in its ability to help each agent separately and all together to serve their customers better. The Ministry of Agriculture and Forestry might encourage learning through its goals and visions and E-mail information systems but this does not actually incorporate the work process that could encourage continuous learning. It is easy to look superficially on networking systems like Internet but the quality of information being disseminated is more important than the quantity. Networking is not enough for a successful end product - we need more of joint processes and alignment.

The Rummler-Branch Group 1992 brings up the following questions for identifying an opportunity for process management. They start from the end product as follows:

1. Identify a product or a service which is not meeting a customer quality requirement.

2. What is the customer requirement that is not being met?

3. What is the input to your organization that triggers the series of events (process) that results in the product/service?

4. What functions contribute to the production of that product or service?

5. Where in the process (between which functions) are the interfaces which are most critical to meeting the customer requirement?

6. Who would be part of a process management team assigned to troubleshoot the problem?

7. If a process management project addressing this issue were successful, what would be different?

Which are the end products which the Government and other customers expect from research, education and extension organizations? Why do they get funds from national/federal/state budgets? How do the agencies show they accountability?

The final products of rural development activities must be economically competitive enterprises, clean rivers and ground water, high quality food products, diversified livelihood structure, and happy rural people. A mosaic of many small enterprises which produce a high level of socioeconomic dwelling but also a better standard of landscape, forest, and land. The development is guided by many values and the final stage, if ever reached, can be evaluated from the value standpoints defined in the goals and visions. Now these joint goals have been missing.
A. TRADITIONAL (VERTICAL) VIEW OF AAS, AR AND HEA ORGANIZATIONS

B. SYSTEMS (HORIZONTAL) VIEW OF AAS, AR AND HEA ORGANIZATIONS
5. From production to enterprizing

Production technology could be created from both basic and applied research and practise but the rural entrepreneur has to master many management information systems in order to cope with complex realities. In the western societies science is the most respected form of knowledge. However, practical solutions will have wide areas of concurrence with the social, economic, and political ideology of the societies in which such a thought is produced. Therefore the rural change agents also need information from other realities than those produced by research and science themselves.

While farming no longer dominates the economies of most rural areas in OECD countries agriculture remains a critical source of income in Finland. Still almost 7% of the national labor force is engaged in farming related activities. Although farm programs alone constitute an inadequate rural development policy farm dependent areas remain heavily affected by agricultural policy.

Therefore the main challenge is to transform through education and training agricultural producers into rural entrepreneurs, who take risks and responsibility of marketing their products in an economic way. In helping people to make this knowledge-attitudes-skill-aspiration change we need both an individual and social system approach. In developing the livelihood and production itself we need food economics, technology, and marketing economics. In the rural areas there are AAS, AR, HEA, government, communal and private agencies, and agents who can partially help in these processes but no one is good and competent enough to do the whole work alone. Therefore a close cooperation is needed between these agencies in defining the strategy both from competence and information delivery standpoints for starting new economic activities.

In a study some years ago (Minkkinen & Westermarck, 1992) it could be seen that many of the persons trying to start a new economic enterprise applied for government loans and support without having developed the business idea any further or having participated in training organized by some agency. The only viable starting point when establishing a new economic enterprise is the scanning of the environment and market niches. Innovations and product development for new niche markets are the mechanism by which economic development occurs, leading to improved products and services and to a higher income in rural areas. The learning process and information finding in understanding the issues of planning, financing and marketing from many different agencies might take quite a long time. Therefore it is of vital importance that agencies and individuals network and interact in a most meaningful way (Picture 4-5) according to their competencies and jointly help the producers to become entrepreneurs. A paradigma shift for building up viable rural areas in many European countries is needed just now.
"Farmer's" commitment

Business establishment
*Financing
*Business planning

"Farmer's" commitment

Society
Business
tecnology

Agent

Research development
Information
Education
Training

Agent

Agent

Agent

Agent
7. Problems and recommendations

From the discussion above, the following recommendations can be presented to enhance the cooperation between AR, HEA and AAS agencies:

1. Problem: Research and extension/advisory service agendas are diverging because

   * planning processes are independent
   * funding sources determine priorities
   * who will determine the research agenda in the future?

Recommendation: Develop and implement a joint planning process for applied research and extension programmes which involves researchers and extension/advisory service personnel and utilizes input (direct or indirect) from farmers, consumers, and political leaders.

2. Problem: Research continues to be primarily discipline in nature. Few truly interdisciplinary projects are conducted which incorporate technological advancement, economic analysis, assessment of the impacts on product processing, marketing and the environment and both real and perceived consumers and social implications.

Recommendation: Establish interdisciplinary research/extension programme committees and give target funding to interdisciplinary research/extension programmes.

3. Problem: Extension and advisory services are not as effective as they might be in integrating research results into a product which is useful to their clientele. Research results are fragmented and disciplinary in nature. Applied research projects are not necessarily planned with the end user in mind.

Recommendation: Increase extension/advisory service staff skills/time to interpret research results and integrate these into effective extension/advisory programmes.

Applied research project budgets and funding agreements should identify funds for extension/advisory services to disseminate and encourage the application of research results.

4. Problem: An increasing public and political distrust of research results generated by universities and other public institutions decrease the effectiveness of the extension/advisory services.

Recommendation: Extension and advisory services should put more emphasis on educating and informing national and communal decision makers of the value of their activities. Also the general public should be kept aware of the achievements of research and university education.
References


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