

농촌지도 교육자의 지방직 전환

김 성 수

서울대학교 농업생명과학대학

Localization of Extension Educators in Korea

Sung Soo Kim

College of Agriculture & Life Sciences, Seoul National University

Summary

한국의 농촌 지도사업은 농민들이 주곡인 쌀의 자급과 푸른 채소의 주년 공급을 달성할 수 있도록 도왔을 뿐 아니라 4-H 클럽 활동의 지도를 통한 농촌 청소년의 지도와 영농후계세대의 육성 등에도 기여하여 왔다. 1997년 정부는 민주화 지방화의 미명 하에 농촌 지도 교육자의 신분을 지방직으로 전환시켰다.

이러한 지방직 전환은 다양한 문제들, 예컨대 1) 농촌 지도 교육자의 사기와 인원수를 줄여 농촌 지도의 사회교육적 기능을 저하시켰고, 2) 중앙과 지방 농촌 진흥기관의 연계를 약화시켰으며, 3) 농촌지도 교육자의 현직 교육 기회를 축소시켰으며, 또한, 4) 농업 연구와 농촌지도의 연계를 약화시키는 등의 부작용을 야기 시켰다.

흔히 농촌지도 공무원으로 부르는 농촌지도 교육자들은 농업 기술의 전파 보급을 위한 전문직이며 미국 등 선진국에서는 국가가 인정하는 지도 교육자 (extension educator)로 전문직업 능력의 향상을 위한 다양한 노력을 경주하고 있다. 국가 목표인 식량의 지속적 생산, 국가의 균형 발전과 환경 보전은 물론 점증하는 농민들의 요구에 부응하기 위해서 농촌지도 교육자들의 사기를 앙양시키는 것은 중요한 과제이다.

안전하고 질 높은 음식의 지속적 공급을 위해서는 농업 생산자들에게 혁신 농업 기술의 전파 보급이 절대적으로 중요하기 때문에 더 이상 농촌지도사업이 훼손되는 것을 방치해서는 안 될 것이다. 농촌지도 사업의 지속적 발전을 위한 국내의 연구는 물론 아시아 태평양 지역 국가들의 농촌과 국가 발전을 위한 협동적 노력도 필요할 것이다.

Key Words : Extension services, Extension educators, Localization, Linkages between agricultural research and extension

I. INTRODUCTION

Agriculture has been an important industry for the Korean people and has been a way of life for a long time. Korea has natural scenic beauty with mountains, hills and paddy fields. It experiences four distinct seasons in a year; pleasantly warm spring, hot summer, pleasingly

cool autumn and cold winter.

However, Korean climatic conditions are not very favorable for farming in general due to extreme temperatures, uneven rainfall, infertile top soil, and a lack of arable land. About 65% of the land is mountainous, and 20% of the total area (1.88 million ha.) is cultivated for farming. Of the arable land, 1.14 million ha. are paddy

<Table 1> Cultivated Area, Farm Population, No. of Farm Households, Average Size of Land Holdings, and Average Size of Farm Family (1960~2000)

Year	Cultivated Area (000 ha)	Farm Population (000 person)	No. of Farm Households (000)	Average Farm Size (ha)	Average Farm Family Size (person)
1960	2,205	14,559	2,350	0.86	6.2
1965	2,275	15,812	2,507	0.91	6.3
1970	2,295	14,432	2,483	0.93	5.8
1975	2,240	13,244	2,379	0.94	5.6
1980	2,196	10,827	2,155	1.02	5.0
1985	2,144	8,521	1,926	1.11	4.4
1990	2,109	6,661	1,767	1.19	3.8
1995	1,984	4,883	1,499	1.30	3.3
2000	1,888	4,032	1,384	1.36	2.9

Source : Ministry of Agriculture and Forestry, 1960~2000.

fields. The remaining .74 million ha. are uplands.

An average farm household occupies 1.36 ha. of arable land as shown in Table 1.

While the total population has expanded with a moderated increase rate, farm population has declined since 1960s due to fast industrialization and urbanization. The number of farm households declined from 2.5 million in 1970 to 1.4 million in 2000. Farm population stood at 4 million persons in 2000, or about 9% of the total population of 46.1 million.

As the economy grows and industrialized, non-farm sectors has pulled labor greatly from farm sector, and the trend of labor shortage and the price of farm labor has increased dramatically. Agriculture in Korea still has an important role in national economy, although it accounts only 4.6% of the GNP, however, the importance may not be explained simply in the statistics because of multifaced functions of the agriculture in the total welfare of the nation including the contribution to environment.

During the period of the economic development, it was the agriculture that contributed greatly in achieving a fast economic growth by providing a cheap food stuffs, diligent working labors and capital accumulations. The basic standard of living in terms of material affluence, has risen substantially due to the increased production. However, in spite of the merits of industrialization, it has been a mixed blessing, producing both products and pollution at the same time.

II. KOREAN AGRICULTURAL EXTENSION SYSTEM

1. The Mission and Goals of Extension

1) The Mission of Agricultural Extension Service

The "Rural Development Law" describes objective of the organizations as to contribute to the

development of farmer' welfare through conducting agricultural experiment and research, transfer of scientific techniques and knowledge on agriculture and rural life, and training of rural leaders and farmers.

The followings are specific missions of the Rural Development Administration:

(1) Conducting experiments and research for developing agricultural technology concerning food crops, livestock, veterinary medicine, horticulture, sericulture and farm machinery, etc., and for developing farm management.

(2) Transferring scientific technique and knowledge for improvement of agriculture and rural life, especially through informal education and demonstration of the effect of scientific knowledge and technology on agriculture and rural life, and through fostering rural people's organizations.

(3) Training farmer, local leader, rural youth, student and teachers in agricultural high school as part of cooperative education, as well as research and extension officials in agricultural technology organizations.

2) The Goals of Agricultural Extension Service

The efficiency of farm management to meet the demands of competitive agriculture and substantial increase in the farmers' income are the key concerns of the Korean agricultural extension services. Extension activities for agrotechnology transfer in Korean are based on the following objectives:

(1) To attain a stable and labor-efficient production of major grain crops.

(2) To improve the quality and cost-efficient production of cash crops and livestock.

(3) To maintain safe and pollution-free crop production and adequate pest management.

(4) To create extra revenues by exploiting high-tech agriculture.

(5) To provide technical support on the production for special local or export market.

(6) To develop sustainable agriculture.

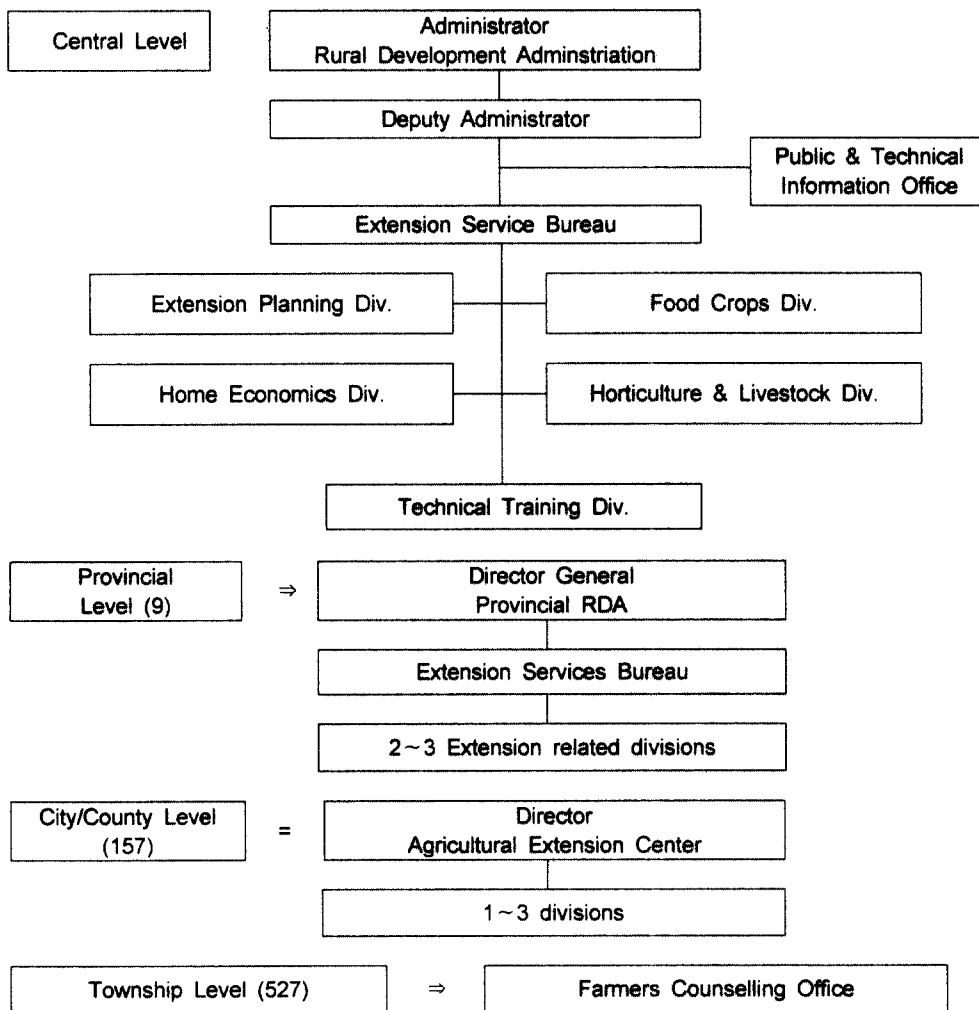
To accomplish the above goals and objectives, the area-specific model projects for higher income and new technologies are implemented at the national as well as regional level.

2. Agricultural Extension System

1) Organizational Set-up

The Rural Development Administration (RDA) is the central government organization for agricultural research and extension services. It was first established in 1906 as the Agricultural Demonstration Station, and subsequently renamed to the Agricultural Experiment Station in 1929, the Institute of Agricultural Improvement in 1947 and the Institute of Agriculture in 1957. It was re-organized as the Office of Rural Development (ORD) in 1962, and, it was re-constituted in 1994 as the present form of RDA by incorporating four national offices from the Ministry of Agriculture and Forestry(MAF). The organizational structure of RDA is presented in Fig. 1.

The Rural Development Administration (RDA), an outside arm of extension and research of the MAF is the national level headquarters for rural development planning and implementation in Korea. Headed by an administrator, the RDA maintains various extension programs through one bureau and two offices: the Extension Service Bureau, the Farm Management Office and the Public and Technical Information Office. There are four divisions under the Extension Service Bureau.



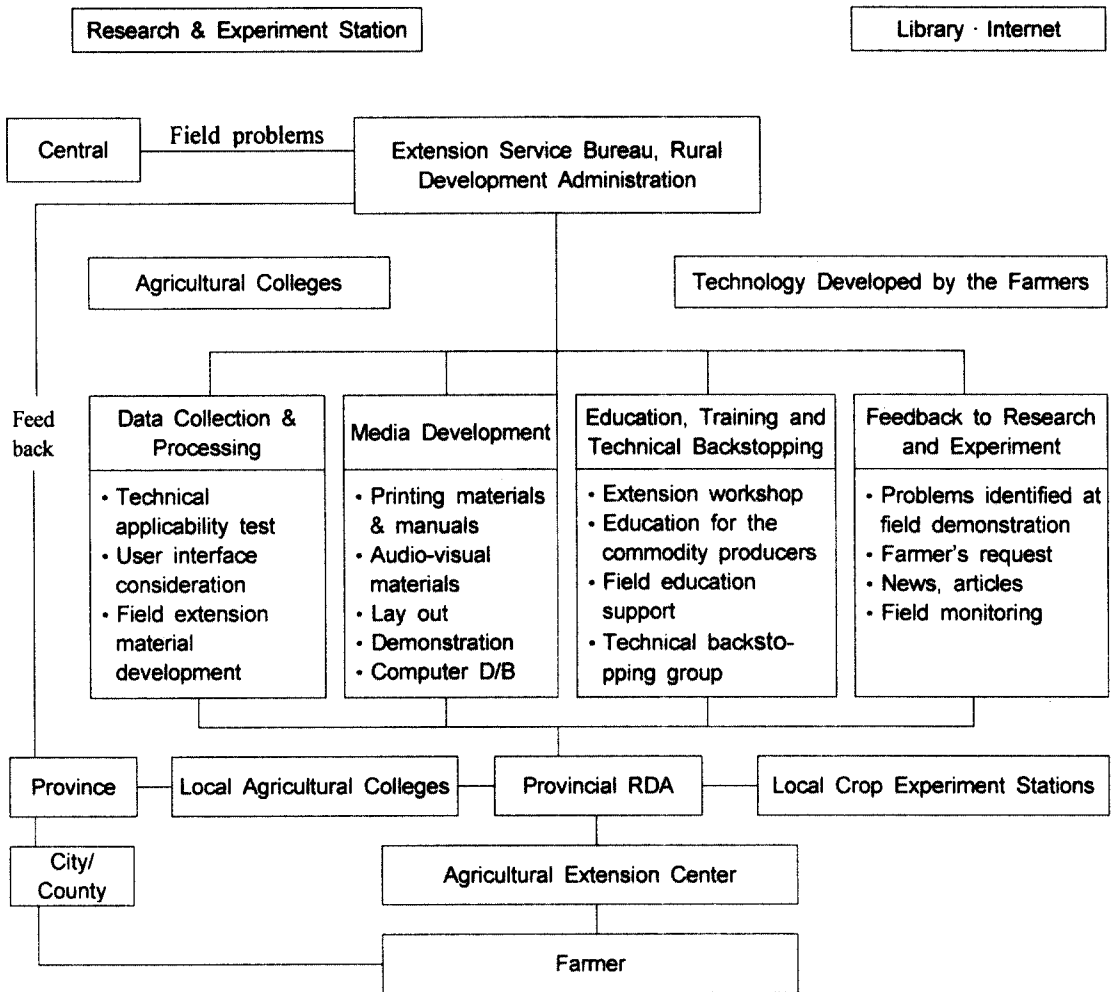
Source: Rural Development Administration

<Fig. 1> Organization for Agricultural Extension in Korea.

As shown in Fig. 2, in Extension Service Bureau, the Extension Planning Division is responsible for budgeting, personnel management and the support of facilities and equipment for national extension activities as well as the integrated community-based rural development, while Home Economics Division is responsible for matters related to rural welfare. Other divisions, which is staffed with production-oriented specialists has two subject-matter divisions

namely Food Crops Division, Horticulture and Livestock Division.

The Farm Management Office is to support both parts of the research and the extension on farm management and computing services with its two divisions. The Public and Technical Information Office, popularly known as “Agricultural Information Center”, is responsible for all the information services of RDA, particularly the preparation, production, distribution and utilization



Source: Rural Development Administration

<Fig. 2> Technology Transfer System for Extension.

of extension teaching materials. Technical Training Division which was removed to the National Agricultural College of the RDA in 1999 is responsible for farmers' training and extension workers throughout the country.

The Provincial Rural Development Administrations (PRDA), numbering 9 in all, represent the provincial organization of the RDA, and PRDAs are outside arms of the provincial

government and consequently controlled administratively by the governors.

The 157 City/County Rural Extension Offices are administratively and technically under the hierarchical control of PRDA. But at the same time, each extension office forms an outside arm of the respective city/county government. The County Extension Office, however, is considerably dependent on the county government in

many ways, including financing, which is probably the most important aspect of agricultural extension work.

There are real grass-root extension organizations under the jurisdiction of the county extension offices named "Farmers Counseling Office" totaling 527 across the country at the Eup/Myun (township) level. Each office is geographically responsible for extension programs. These local extension offices make plan and carry out localized programs, and at the same time execute national extension programs financed by the national government.

2) The Characteristics of Organizational Set-up

The characteristics of organizational system can be summarized as follows :

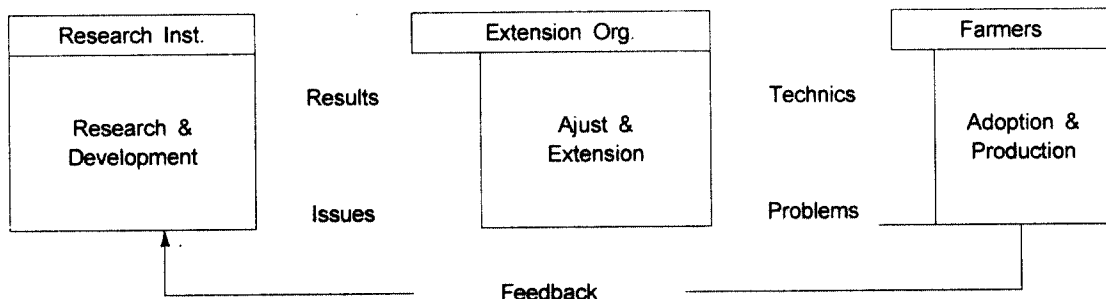
(1) Since both functions of research and extension are integrated under the same administrator of RDA, the results of agricultural research and experiment and newly-developed technology could be more effectively, efficiently and timely disseminated to the farmers though the nationwide extension channels and networks. Problems which occur in the course of extension

activities can be easily adopted as research projects.

(2) Results of research are thoroughly examined, screened, and given economic analysis by the research and extension joint evaluation committees. These results are reflected for agricultural policies, and extension services. Related extension specialists are always aware of research programs going on and actively participate in research planning and evaluation activities.

(3) Participation of researchers in extension programs is not only helpful for technical dissemination but also provides very useful information for improving agricultural research programs. Researchers have opportunities to review the applicability of their research findings on the farm field through their involvement in extension activities such as field observation trip, training farmers, evaluation meeting, etc.

(4) The institutional cooperative relationship of the extension service system with provincial and local governments, generally known as general administrative agencies is another characteristic. With this relationship, the extension program is not only easily integrated into comprehensive rural development policies, but also supported



Source : Rural Development Administration

<Fig. 3> The Linkage of Research and Extension.

from the administrative agencies.

(5) Besides, this close cooperative relationship between the extension program and administrative policies at all levels, the budget for agricultural extension services comes from central, provincial and city/county governments in collaboration with each other.

The following Fig. 3 shows the linkage of research and extension for agricultural technology transfer in Korea.

III. LOCALIZATION OF EXTENSION EDUCATORS

Over the last four decades, Korea has experienced dramatic changes in farm practices as a result of agricultural extension services aimed at achieving self-sufficiency in staple foods. During the last 40 years, extension services have helped Korean farmers in achieving self sufficiency of rice and year around supply of green vegetables by diffusion of vinyl house technology. Since 1997, Korean government changed the status of extension educators from central government staff to county/city government staff for the sake of democratization and localization, regardless of opposition of academic society of extension professionals.

Various problems after three years of localization of extension educators were emerged and national efforts should be needed to restore morale of extension educators to continually achieve the national goals of food production, balanced national development and preservation of environment, at the same time to meet increasing needs of farmers.

Korean agriculture now faces a historic challenge due to globalization and decentralization. Political demand for decentralization trends in Korea has led the government to plan to localize

its agricultural extension system by changing the status of 6,696 extension personnel stationed at the provincial and county level from central officials status to local officials status as of January 1997.

Before 1997, the results of agricultural research were effectively and efficiently diffused to farmers through the national extension network. Both functions of research and extension were practically integrated so that the administrator of the RDA was responsible for these two closely interdependent administrative functions, there was certainly clear-cut advantages for the extension services.

1. Extension Agencies

The numbers of extension agencies were 181 at city/county level and 1,464 Eup/Myun (township) level in 1987, however, the numbers of extension offices were reduced to 157 and 534 respectably in 1998, a year after implemented localization as shown in Table 2.

2. Extension Educators

Extension educators are central or local government officials, and the administrator of RDA had taken charge of local extension personnel administration, directly or indirectly including appointment, positioning and promotion. However, since 1997, most of the personnel affairs has been managed by the governor of each local government.

The number of extension educators has steadily increased to reach a total of 7,979 at the end of 1990. After localization of the extension service in 1994, administration authority was transmitted from central to local government. Again in 1997, government decided to change the nomination

<Table 2> Number of Extension Agencies by Selected Year

Year	Central	Provincial Level	City/County Level			Eup/Myeon Office	Remarks
			Total	City	County		
'87	1	9	181	42	139	1,464 (22)	a year before 88 Seoul Olympic
'94	1	9	182	46	136	1,302 (28)	Preparation for Localization Implemented Localization
'97	1	9	162	69	93	1,415 (9)	
'98	1	9	157	67	90	534 (18)	
'99	1	9	157	67	90	527 (9)	
'00	1	9	157	67	90	527 (9)	
'01	1	9	157	67	88	456 (9)	

Source: Rural Development Administration.

right of field extension personnels from the central to local government. And now, we have 5,032 extension officials throughout the country, as shown in Table 3.

Extension educators at the national level or RDA, there are a total of 71, mostly senior subject-matter specialists in 2000. There are a total of 235 extension personnel at the 9 provincial RDAs. and a total of 4,726 extension educators are stationed at the 157 county extension offices.

Percentage-wise, approximately 6 percent of the total number of extension personnel are

stationed both at the national-level(RDA) and at the provincial-level agencies. The remaining 94 percent of the total extension personnel are working directly with rural people, stationed at the local level of either county extension offices or their branch offices. An extension educator covers 8 villages of the lowest administrative unit with 292 farm households and 402 hectares of farm land on the average.

3. Extension Budget

Experience has shown that in allocating

<Table 3> Changes in Number of Agricultural Extension Educators in Selected Year

Year	Total	Central	Province	City/County	Remarks
'62	3,173명	75	180	2,918	Enact Rural Development Law
'70	6,360	73	236	6,051	Rice & Barley Guidance
'81	7,979	105	226	7,648	Farm Income Guidance
'97	6,839	91	289	6,459	Implemented Localization
'98	5,545	85	241	5,219	1st Restructring
'99	5,032	71	235	4,726	2nd Restructring

Source : Rural Development Administration.

operational authority and responsibilities, subsidiarity is key: decision-making should devolve to the lowest possible level of government consistent with efficient use of funds. All levels of government must be willing to involve farmers and other stakeholders in project planning, design, and implementation. And funding must follow function: local authorities must have resources commensurate with their added responsibilities.

Recent trends on sustainable agriculture as defined as ecologically sound, economically viable, and socially just and humane, has received considerable attention in recent years from environmentalists, agriculturalists, and consumers. Extension services need more funding and manpower to meet emerging needs of environmentalists, agriculturalists, and consumers, however, Extension Budget by Year, especially after localization of 1997, did not reflect these

needs as shown in Table 4.

IV. PRE-REQUISITE FOR DECENTRALIZING EXTENSION SERVICES

1. Democratic Decentralization and Localization

Since the mid-1980s more than 60 governments, mainly in developing countries, have experimented with some form of decentralization. Defined as the transfer of powers and resources from higher to lower levels in a political system, decentralization can take three forms. These forms can stand alone or work together:

1) Deconcentration, or administrative decentralization, occurs when agents in higher levels of government move to lower levels.

Table 4. Extension Budget by Year

Year	Budget	Source				Remarks
		National		Local		
		Amount milW	%	Amount milW	%	
'91	112,735	11,897	10.6	100,838	89.4	
'92	131,421	14,160	10.8	117,261	89.2	
'93	145,090	17,867	12.3	127,223	87.7	
'94	207,275	20,691	10.0	186,584	90.0	
'95	285,600	92,600	32.4	193,000	67.6	
'96	360,128	90,975	25.3	269,153	74.7	
'97	432,894	97,614	22.5	335,280	77.5	Localization
'98	263,918	82,177	31.1	187,741	68.9	
'99	258,615	91,173	35.3	167,442	64.7	
'00	240,878	85,260	35.4	155,618	64.6	

Source : Rural Development Administration.

2) Fiscal decentralization occurs when higher levels of government cede influence over budgets and financial decisions to lower levels.

3) Devolution, or democratic decentralization, occurs when resources, power, and often tasks are shifted to lower-level authorities who are somewhat independent of higher authorities, and who are at least somewhat democratic (Manor 1999).

For democratic decentralization to work well, elected bodies at lower levels must have substantial powers and resources (financial and administrative), and strong accountability mechanisms must be created to hold bureaucrats accountable to elected representatives and elected representatives accountable to citizens.

Several other features are helpful but not essential to effective democratic decentralization: a free press, multi-party systems, a lively civil society, experience with democratic politics, and respect for laws and formal rules. It helps if wealth and property are widely and relatively equitably shared, and if a middle class exists but does not exercise unyielding hegemony over poorer groups. It also helps if the region is free of severe social conflict, and if there is an effective government administration.

2. Enhancing Financial Capacity and Mobilizing Local Resources

Some people argue that decentralization is desirable because it both should and indeed in practice will maximize the growth of local revenue resources. Others argue that in most developing countries the majority of funding for decentralized bodies will inevitably come from central government. The main argument for maximizing local revenues is that it puts the responsibility for costs, tax levels, and expen-

ditures on the shoulders of local beneficiaries and local decision-makers. It therefore maximizes the accountability of government to taxpayers, and underpins genuine local political and managerial autonomy.

Given the general inadequacy of local revenue bases and the control of governments over financial transfers it is unlikely that decentralization will lead to fiscal indiscipline.

The problems facing local revenue mobilization are of a different order:

1) The efficiency (cost to yield) of most local taxes is low. They have the most potential in cities, which have a broader commercial revenue base than rural areas.

2) Unless local authorities outside the big cities are delimited at a large scale, there is an inherent lack of resources. More radical attempts to force local authorities to be more self-reliant (often a major motivation for governments facing a budget crisis) are only acceptable if one is prepared to accept the reduction of local government to minimal functions or to a form of community action with limited capacity.

3) Political cynicism and distrust will deepen if local politicians try to increase taxes. The legitimacy of local taxation has long been undermined by poor performance caused by lack of resources coupled with the unwillingness of taxpayers to pay taxes when there are no perceived benefits.

4) Not only are local resources limited, they are unevenly distributed, so increasing reliance on local revenues can create spatial inequality. What determines the success of a local government, at least in its capacity to provide services, may be the accidents of location and the endowments of the local economy rather than its institutional design or administrative performance.

5) Lack of administrative capacity increases

the difficulty of developing new tax bases. Those who argue for continued and substantial central funding suggest that the source of funds is less important than expenditure and managerial autonomy, which depend on the kinds of central control exercised regardless of source. Effective financial management depends on a balance between expenditure autonomy and mechanisms of central monitoring and auditing that are rigorous but not too administratively cumbersome. Effective decentralized bodies require, above all, stable and assured sources of income that are appropriately matched to their functions.

6) Those who advocate decentralizing the responsibility for revenue raising to the local level often encourage user charges. This is a way of making the most direct link possible between cost and benefit to the user of a service or facility. But user charges are only suitable for services that can be purchased by individuals, and a full 'economic cost' charge may not be feasible. The charges do not solve the problem of endowing local authorities with the capacity to provide the service, and there are still considerable difficulties with their use in poor communities. Transportation services can be run successfully on private lines, but experience shows that sanitary facilities or waste disposal services will simply not be purchased if there are user charges, and will disappear.

3. Potential Results from Democratic Decentralization

Democratic decentralization has considerable potential in many areas, and especially in strong political systems with reliable accountability mechanisms, and in which decentralized bodies

possess adequate funds and powers. Given time, decentralization can :

1) Give governments a sense of ownership of more consensual approaches to governance, by persuading them that they now have more information and can perform more effectively, and give ordinary citizens a greater sense of ownership both of locally designed development projects and of programs that originate higher up.

2) Contribute to greater coordination of policies and personnel from numerous line ministries, and break up bottlenecks and reduce delays in decision-making.

3) Enhance local political participation and quicken local associational activity. It thus enlivens civil society and draws it into structured and moderating political processes, even when it also catalyzes greater competition and conflict among people seeking election. In the process it tends to give civil society organizations a greater sense of ownership over government policies, processes, and projects.

4) Encourage partnerships between government agencies and the private sector, and make government processes more transparent to ordinary citizens.

5) Make government institutions more open by providing opportunities for elected representatives at lower levels to influence official decisions and the design and implementation of government programs, and enhance the accountability of elected representatives to citizens, and help programs be more responsive and appropriate to local conditions.

6) Decentralization does little to encourage long-term development perspectives, or to help promote sequencing and pacing of reforms. Nor (on present evidence) does it assist much in

enhancing the state's financial capacity by mobilizing local resources, or in promoting economic growth.

4. Institutional Arrangements for Decentralization

Agricultural extension services are under increasing pressure to become more effective, more responsive to clients, and less costly to government. Decentralization is an increasingly common aspect of extension reforms. Field extension advisory services are suited to decentralized approaches, but a comprehensive extension system requires a range of extension support services and programs, some of which (strategy formulation, training, monitoring and evaluation, specialized technical support) are often best carried out at the central level.

Decentralization strategies include institutional arrangements that :

1) Decentralize extension services where possible, with emphasis on giving users control over program planning, implementation, and evaluation.

2) Provide for adequate centralized support systems for decentralized extension services, especially support for training, subject matter specialists, and production of extension materials. Adapt strategies to local institutional environments to accommodate country legal frameworks, political traditions, administrative structures, and social and agro-ecological conditions. Extension strategies can emphasize decentralization when there is already a strong political decentralization in the country, but should proceed cautiously when decentralization is not yet well established.

3) Determine on a case-by-case basis whether decentralized services should be managed by

local governments, community/producer organizations, or local governments in conjunction with producer/community organizations.

4) Provide clear division of responsibilities between the different levels of government and other program participants.

5) Develop procedures for policy formulation and priority setting in mixed systems to reconcile central government financing and policy objectives (poverty alleviation, food security, and environmental conservation) with local peoples' priorities that emerge from the decentralized program governance. Provide for needed fiscal transfers from central government to decentralized implementing agencies to finance decentralized extension services, recognizing that over the short term decentralization rarely reduces requirements for central government financing.

5. Pre-requisites for Decentralizing Extension Services

1) Recognizing Multiple Extension Functions

National agricultural extension systems must incorporate a range of extension activities that vary in suitability to decentralization. Field advisory services, as the traditional extension methodology, are compatible with decentralized program strategies and in some cases are suited to private service provision or complete privatization. Other services to support field extension agents and complement field advisory services are often better suited to centralized production. Functions best centralized are those that: 1) support national strategies and financing mechanisms; 2) involve economies of scale and scope; 3) serve a number of administrative regions; 4) require greater technical input and

networking than can be managed at the local level. Services needed in a comprehensive extension system include: 1) Extension policy, strategy formulation, and 2) centralized planning; 3) Training programs for extension agents

2) Strengthen Central Support Services for Extension

Some technology system functions are best provided centrally, due to economies of scope or scale in their production or the nature of the service involved. These include system strategy development, extension service quality control (training, subject matter specialist support, and production of extension materials), and monitoring and evaluation. Quality of field extension advisory services is dependent on some of these programs, which must be strengthened in any initiative to decentralize extension services. Decentralized extension requires central support to plan and coordinate programs, facilitate effective institutional linkages, formulate national policies, and ensure that national priorities are addressed. Successful models for research-extension linkages in decentralized systems are still needed. Centralized monitoring and evaluation are also important as a basis for national planning and for comparing program performance and impacts.

3) Provide Mechanisms for Policy Formulation in Mixed Systems

Central government financing of extension programs must be directed toward national policy objectives (poverty alleviation, food security, and environmental conservation). Reconciling national objectives with priorities emerging from decentralized programs requires flexibility and planning

and budgeting systems that integrate both sets of priorities.

4) Expect to Continue Public Sector Financing

In the short term, decentralization rarely reduces requirements for central government financing for extension, and decentralization initiatives should count on increased central government funding, at least during their initial stages. This may be defensible, because technological innovation in agriculture remains, in many cases, a public good and warrants public funding. However, where government budgets face fiscal restraints, the higher costs associated with decentralization raises issues of sustainability. The question then becomes how to best manage the same amount of funding, possibly implying a decreased service coverage balanced by improvement in effectiveness of services. Although decentralization may initially increase the level of public funding required, over the long term it offers opportunities for producers to cofinance some technology services. Leveraging funding from users and an increase in efficiency of service provision can increase total financing available for extension programs. The feasibility and desirability of user cofinancing will vary depending on the local situation.

5) Fiscal Transfers for Research and Extension

Fiscal transfers from the central government are almost always required to finance decentralized extension. These should be structured to give users maximum influence over programs and to promote institutional pluralism in service provision. Empowering users to contract the most

relevant and cost-effective services, and developing a range of public and private providers, should result in the most competent and efficient institutions being selected to provide services.

6) Plan for Transition

Decentralization reforms imply fundamental changes in bureaucratic relationships and program operations. These transitions are difficult and must be preceded by careful planning, promotion of the rationale and principles behind reforms, training in new operational procedures, and preparation of new operating manuals and transition guidelines. Rapid introduction of reforms may be advisable to facilitate a clean break with past practices, but decision-makers should expect delays in establishing reforms and new operating procedures. Naming a transition team to manage reforms and address problems may facilitate the transition process.

7) Local Capacity Development

Building local government capacity is a pre-requisite for decentralizing extension services, because local governments often do not have the technical and managerial capacity to take on responsibility for managing technology programs. Local institutions taking on responsibility for extension might require investments in staff development, facilities, and management systems. Policy-makers must allow time perhaps several years or local institutions to develop this capacity and experience needed for effective program management.

8) Ensure Monitoring and Evaluation

Decentralized systems, especially in their early

stages, require strong centralized monitoring and evaluation systems to provide policy-makers with necessary information to understand how well programs are functioning, who is benefiting, and what impacts the programs are having. The monitoring and evaluation system must feed information to a planning system that can adjust program guidelines and priorities as necessary. Decentralized implementing institutions require their own M&E systems to support decision-making, program management, and planning at the local level. In practice, M&E systems at the various levels should be integrated in a comprehensive system to provide for information needs at each level and to maintain quality and reliability of data.

V. CONCLUSIONS

Korean government changed the status of extension educators from central government staff to county/city government staff for the sake of democratization and localization since 1997, without carefully considering various institutional arrangements and pre-requisites for decentralization/localization mentioned above. This brought about various problems such as: 1) decreased morale and number of extension educators, thus weakening the extension education function; 2) weakened linkages between national and local extension offices, 3) less opportunity for in-service education of extension educators, and 4) weakened linkages between agricultural research and extension, etc.

In order to insure that extension educators are high caliber professional individuals, it is crucial to establish a system that nationally recognizes these individuals as such, and that provides a professional development path. It is important to review the pre-requisite for decentralizing

extension services, and to restore the morale of extension educators to continually achieve the national goals of food production, balanced national development and preservation of environment, at the same time to meet increasing needs of farmers.

Because of the critical importance of diffusing innovations to agricultural producers in order to ensure quality and steady food supply, it is crucial that these issues be addressed before the extension service further deteriorates. Further research activities on agricultural extension should be conducted for more effective agricultural extension system in Korea as well as in the Asia and Pacific countries to achieve a greater rural, national and regional development.

VI. REFERENCES

1. Berry, W., 1990, What are people for? San Francisco: North Point Press.
2. Helgesen, Geir, What is culture, NIAS nytt, No. 2, July 2001, Nordic Institute of Asian Studies
<http://joe.org/joe/>
<http://unescap.org/mced2000/>
<http://www.asiadhrra.org/>
<http://www.fao.org/sd/>
<http://www.fourhcouncil.edu/>
<http://www.yfnet.org/>
<http://www.ifpri.org/>
<http://www.unep.org/>
<http://www.unescap.org/theme/>
<http://www.wto.org/english/>
3. Kim, Sung Soo, Localization Process of Agricultural Extension Personnel and the Task for the Future, Korean Journal of Agricultural Extension, Vol 3, No 2, 1996.
4. _____, A Study on the University Agricultural Extension Education in Korea. Korean Journal of Agricultural extension, Vol 4, No 1, 1997.
5. _____, The Principle and Improvemental Directions of the Eco-friendly Rural Development Plan, Korean Journal of Agricultural extension, Vol 4, No 2, 1997.
6. _____, Agricultural Extension, Korea Open University Press, 1997, pp1-372 (Co-author, Textbook in Korean).
7. _____, The First Year Pre-Evaluation of Localization of Agricultural Extension, Korean Journal of Agricultural Extension, Vol 4, No 2, 1997.
8. _____, A Study on the Environmentally Responsible Behavior of Adolescents, Journal of Korean Agricultural Education, Vol 3, No 3, 1998.
9. _____, A Study on the Residents' Sense of Community in Korea, Community Development Review, Vol 23, No 2, 1998.
10. _____, A System Approach on the Linkages in Agricultural Technology System, Korean Journal of Agricultural Extension, Vol 5, No 1, 1998.
11. _____, Tasks of Agricultural Extension in Korea-with special reference to cooperative agricultural extension services in the United States and it's implication, Korean Journal of Agricultural Extension, Vol 5, No 1, 1998.
12. _____, A Systems Approach to the Linkages among Agricultural Research, Extension and Farmers in Korea, Korean Journal of Agricultural Education, Vol 31, No 2, 1999. pp 61-84.
13. _____, The Promotive Schemes of Linkage Between Consumers Cooperatives and Farmers' Organizations. Korean Journal of Agricultural Extension, Vol 6, No 1,

- 1999.
14. _____, Directions for More Effective County Extension Committees, Korean Journal of Agricultural Extension, Vol 6, No 2, 1999.
 15. _____, National Tasks and Agricultural Extension Education in the 21st Century, Korean Journal of Agricultural Extension, Vol 6, No 2, 1999.
 16. _____, A Comparative Study on Communication of Agricultural Innovation, Korean Journal of Agricultural Extension, Vol 7, No 1, 2000.
 17. _____, Concepts and Perspectives of the Information Age, Rural Life Science, Vol. 21, No. 1, 2000, pp 44-49.
 18. _____, Program Development for Supporting U-turn Farmer in Rural Settlement, Ministry of Agriculture & Forestry, 2000, pp 1-176.
 19. _____, Suggestions for the Development of Agricultural Extension Services in Korea, Research & Extension, Rural Development Administration, Vol. 41, No.9, 2000, pp 13-17
 20. _____, For a Paradigm of Agricultural Extension Services as National Basic Function, Farming and Horticulture, Monthly Farming & Horticulture Vol.15, No.12, 2000, pp 154-155.
 21. _____, Problems in Localization of Extension Educators in Korea, Korean Journal of Agricultural Extension, Vol 7, No 1, 2000.
 22. _____, Changes in Agricultural Extension Services in Korea, Korean Journal of Agricultural Extension, Vol 7, No 1, 2000.
 23. Kim, Sung Soo, Kyung Joon Kim, Kyung Suk Jun, 2000, A Study on the Development of Rural Youth Policy for the 21st Century Journal of Korean Agricultural Education, Vol. 32, No. 4, December 2000, The Society of Korean Agricultural Education, Suwon, Korea
 24. Rosegrant, Mark W. and Peter Hazell, Transforming the Rural Asian Economy: The Unfinished Revolution, Oxford University Press for the Asian Development Bank, 2001
 25. Simeral, Kenneth D., 2001, Keeping a Traditional Program-Delivery Method in an "E" World, Journal of Extension [On-line]. 39(1). Available: <http://www.joe.org/joe/2001february>
 26. Stevens, Georgia L. & Kathleen Ann Lodi, 1999, Community Coalitions: Identifying Changes in Coalition Members as a Result of Training, Journal of Extension [On-line]. 37(2). Available: <http://www.joe.org/joe/1999april>.

(2001년 10월 27일 접수, 심사 후 수정 보완)