

THE ROLE OF AGRICULTURE CHAMBERS IN AGRICULTURAL EXTENSION: A SAMPLE OF HANOVER REGION, GERMANY

Orhan ÖZÇATALBAŞ

Akdeniz University, Faculty of Agriculture, Department of Agricultural Economics, Antalya, Türkiye

Abstract

The main aim of extension is to increase the level of living standards of the rural family with non-formal education. For this reason, extension activity is implemented by different institutions in the world. In Germany agricultural extension services are the responsibility of the Ministry of Agriculture, and Chamber of agriculture and private extension institutions. The private extension units are developing rapidly but it is still not alternative to the current extension systems in the country. There are 16 federal states in Germany but each state does not have its own Chamber of agriculture. The State of Lower Saxony has two agriculture chambers and one of them is located in Hanover. The Chamber of Agriculture of Hanover plays a very important role and functions in the Hanover region in terms of organisation of the extension. The purpose of this paper is to show the role of the Chambers of agriculture in the extension activities. To capture this aim, the extension activities of Agricultural Chamber of Hanover, which is performed the agricultural extension activities in the Hanover region are examined.

Keywords: agricultural extension, extension systems, chamber of agriculture, Germany

Ziraat Odalarının Tarımsal Yayımındaki Rolü: Almanya Hannover Bölgesi Örneği

Özet

Yayımin temel amacı kırsal alanda yaşayan ailelerin yaşam standardını okul-dışı eğitsel faaliyetlerle artırmaktır. Bu nedenle yayım faaliyeti tüm dünyada farklı kurumlar tarafından yürütülmektedir. Almanya'da tarımsal yayım hizmeti tarım bakanlığı, ziraat odası ve özel yayım birimleri tarafından verilmektedir. Özel yayım birimleri, günden güne gelişmektedir. Ancak ülkede uygulanan mevcut yayım sistemlerinin henüz alternatifi durumunda değildir. Almanyada 16 eyalet bulunmaktadır. Ancak her eyalette ziraat odası yoktur. Aşağı Saxonya Eyaletinde, birisi Hannover'de olmak üzere 2 tane ziraat odası vardır. Bölgede Hannover Ziraat Odası yayımın organizasyonunda çok büyük rol ve işlevlere sahiptir. Bu çalışmada, ziraat odalarının yayım faaliyetlerindeki rolünün ortaya konulması amacıyla, bir örnek olarak Almanya'nın Hannover Bölgesinde yayım faaliyetlerini yürüten Hannover Ziraat Odası incelenmiştir.

Anahtar Kelimeler: Tarımsal Yayım, Yayım Sistemleri, Ziraat Odası, Almanya

1. Extension in Germany

The Ministry of agriculture, and Chambers of agriculture and private extension institutions carry out agricultural extension service in Germany. The private extension services are developing rapidly but it is still not an alternative to the existing system in the country.

In Germany, there are 16 federal states. Each state has different extension

systems. Furthermore it is possible to meet different extension systems in the same state. For example, private extension services play mainly an important role in the horticulture while the Ministry of Agriculture performs agricultural extension activities in the field crops.

In the State of Saxony-Anhalt, the number of horticultural farms is less

compared to other farms. For this reason there is not any extension service in this state for the horticulture. There is only one person who is working in the state to collect data from horticulture farms (Uhte, 2000).

Generally, there are three extension systems in Germany. They are as follows:

i. Non-governmental extension organisation (farmer-union based):

This is a paid extension service carried out by the Chamber of Agriculture. Farmer-union based extension system is applied in Lower Saxony, North Rhine-Westphalia, Rhineland-Palatinate, Schleswig-Holstein, Bremen, Hamburg and Saarland.

ii. Ministry-based extension organisations:

This is a free of charge extension service performed by the Ministry of Agriculture. This type of extension service is applied in Baden-Württemberg, Bavaria, Berlin, Hesse, Thuringia, Mecklenburg-Western Pomerania, Saxony-Anhalt and Saxony.

iii. Private sector-based organisations:

This is also paid extension service carried out by the private extension services. The private sector based extension is applied in Brandenburg state and there are ten extension staffs who are serving to the growers of horticulture (Uhte, 2000).

2. Extension in Hanover Region

2.1. Hanover Region

The Lower Saxony is a large agricultural state. In the State, rural and agricultural extension services are the responsibility of the Chamber of Agriculture.

In the same time, the Lower

Saxony is the second largest state and approximately 7,5 million people

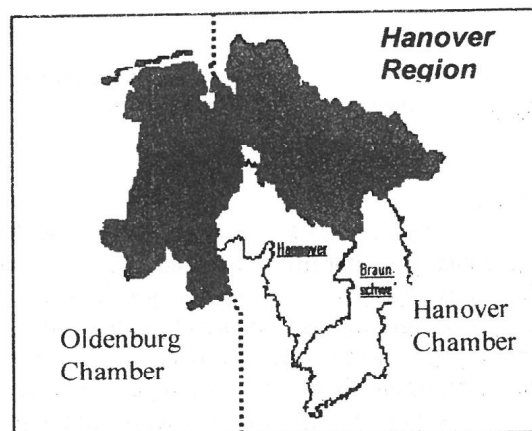


Figure 1. Chambers of Agriculture in Lower Saxony.

inhabitant. Hanover is a capital city of Lower Saxony State. The State has four provinces (Figure 1). Three of them are located in the Hanover region: Luneburg, Brunswick and Hanover. In this region arable land is about 1,7 million hectares and 41,000 farms larger than one hectare. The Chamber of Agriculture of Hanover is responsible for extension activities in three provinces. The Chamber of Agriculture of Hanover is located in Hanover province.

The State has one of the best extension systems in Germany. It is therefore the State is tried to transfer its extension model to the Mecklenburg-Western Pomerania and Saxony-Anhalt and Saxony (Bruns, 1999).

2.2. The Chamber of Agriculture of Hanover

The Chamber of Agriculture of Hanover ("LandWirtschaftskammer Hannover-LWK"; Here after "The Chamber" is used instead of the Chamber of Agriculture of Hanover) is the biggest European chamber with 1350 employees, 26 county agencies and several institutes. About 250 staff works in the main office in Hanover. The

majority of staff work in the agencies of county, district agencies and forestry agencies and research institutes, education and field experimentation (Rhein, 2000; Märkisch, 1999).

It can be said that the Chamber has a very important role and function in the rural-agricultural-horticultural information system and extension organisation in the Hanover region.

2.2.1. History of the Chamber

The Chamber was established on March the 5th, 1899. It was the first agricultural society established by the independent farmers. This society becomes a Chamber in the Reichsnährstand during the beginning of Third Reich Period.

After the World War II, in addition to land owners the agricultural workers were also accepted to be member of the Chamber.

In 1954, based on the Chamber's laws, two chambers were established in the Lower Saxony.

2.2.2. Organisation Structure

The structure of organisation of the Chamber was given in Figure 2. The president of the chamber, a practising farmer, is the highest representative and top of the administration as well. Highest committee of resolution is the so-called chamber assembly (like a parliament), with 171 members by honour, which are elected for a period of six years.

The members of the chamber assembly consist of farmers (2/3) and agricultural employees (1/3). The assembly meets once a year and it is allowed to select additional expert. The president and executive committee are selected for three years by the chamber assembly. The assembly dominates several committees out of its own, which

supports the specialised work of the full-time staff. A very close co-ordination is possible between full-time experts and practical farmers.

The Chamber of Agriculture is a public body and a self-govern of the farmers at the same time. It is more than just an authority and it is not a farmer union. It is a compulsory to be a member of the Chamber for the owners of arable lands.

2.2.4. Basic Tasks of the Chamber

Based on number 2 of Lower Saxonian law of chambers, the Chambers of agriculture have to improve "the agriculture and living standards of farmers in accordance with the interests of society".

There are two different functions of the Chamber. The first function is called duty-tasks, which are defined as original tasks of rural affairs, and this tasks delegated to Chamber by the government. The duty- tasks are written down in the law chamber. The chambers are responsible for them on their own. The second tasks have to be directed and supervised by the state government.

Education and advanced training courses called "green professions" as well as various advisory services are the most important duties of the Chamber. The advisory services have to be shared with private advisory circles and farmers associations in the rural districts (these farmer associations are political representation of the farmers).

Besides agricultural tasks the chambers take care of private forests which is cover about 400.000 hectares.

For future tasks such as protection of nature, environmental protection and rural development will gain more and more importance. In addition to this there is increasing amount of jobs referring to administration in general

(application on for EEC-payments and various systems of application for subsidies and financial aids of the federal and county government).

Briefly, the most important tasks and functions of the Chamber are as follows:

- to organise and apply extension services
- to educate extensionists (in centre of training of Ahlem and Main Centrum of LWK for extensionists and farmers)
- to manage research (research institute of Ahlemer and LUFA Hameln)
- to provide contact between research institutes
- to provide contact with universities (Hanover, Munich and Berlin)
- to improve contact with international research institutes (Denmark, The Netherlands)

3. Chamber of Agriculture-Based Extension in Hanover Region

As mentioned above, as well as new states of Germany, Ministry of Agriculture carries out extension services in the eight states. It means that extension services conducted by the Ministry of Agriculture cover more than half the country.

3.1. Extension in the Chamber

Two main characteristics of the extension organisation of Hanover region should be highlighted. They are as follows:

1. Agricultural extension excluding horticulture (extension is oriented to agriculture but horticulture)
2. Horticultural extension

The main reason for this classification is the usage of different extension organisation types for horticulture and other agricultural production activities. In another words, different approaches and methods of extension are used in horticulture and

agricultural activities.

In the paper, firstly extension activities in agriculture excluding horticulture are examined as "General Extension Activities in Hanover Region". The general extension activities include field crops, animal production, forestry, farm-home economics and other socio-economic aspects of the farms.

Secondly horticultural extension activities and services are examined as "Horticultural Extension in Hanover Region". The horticulture extension activities cover vegetables, fruits and ornamental plants.

3.2. Extension Organisation

Total staff number of the Chamber is 1,350 people. Around 400 of this staff work in the Main Office (Centrum) of LWK in Hanover (Rhein, 2000). As can be seen from Figure 3, the Chamber is divided into six general directorates and 30 divisions.

The Chamber has 3 institutes, 5-district office, 26 county office and 12 forestry offices. These institutions play a very important role in terms of implementation of extension activities. The president of the Chamber is farmer and he or she is a natural member of the Chamber. However, director of the Chamber must be a professional manager.

The Chamber is divided into six departments as it shown in Figure 3. The one of them is Department of Education, Extension and Housekeeping. This department is supported by the 26 county offices and two research institutes (Lufa Hameln & Ahlemer). The tasks of other departments are administrative and technical fields.

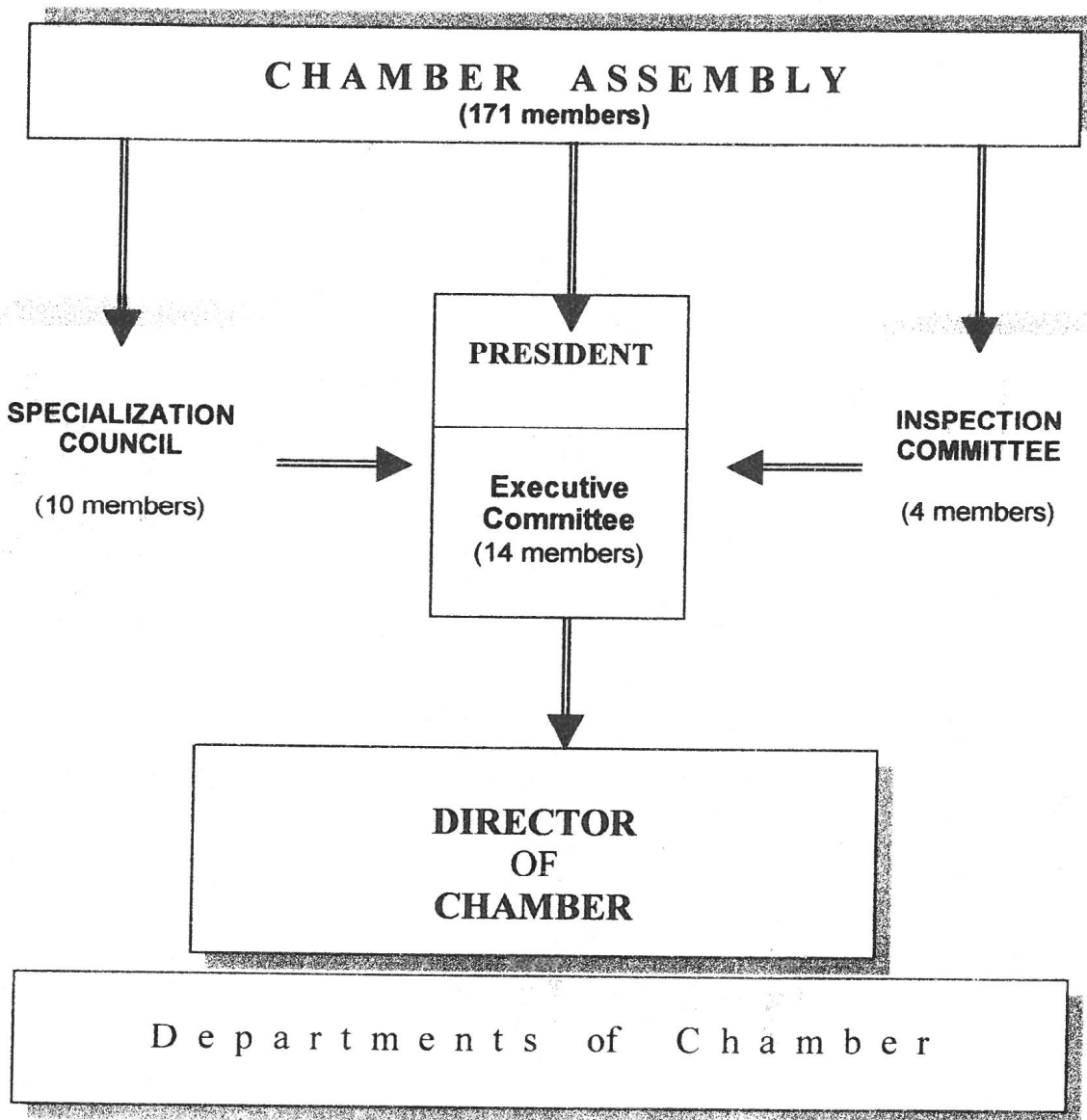


Figure 2. The organisation structure of the Chamber of Agriculture of Hanover.

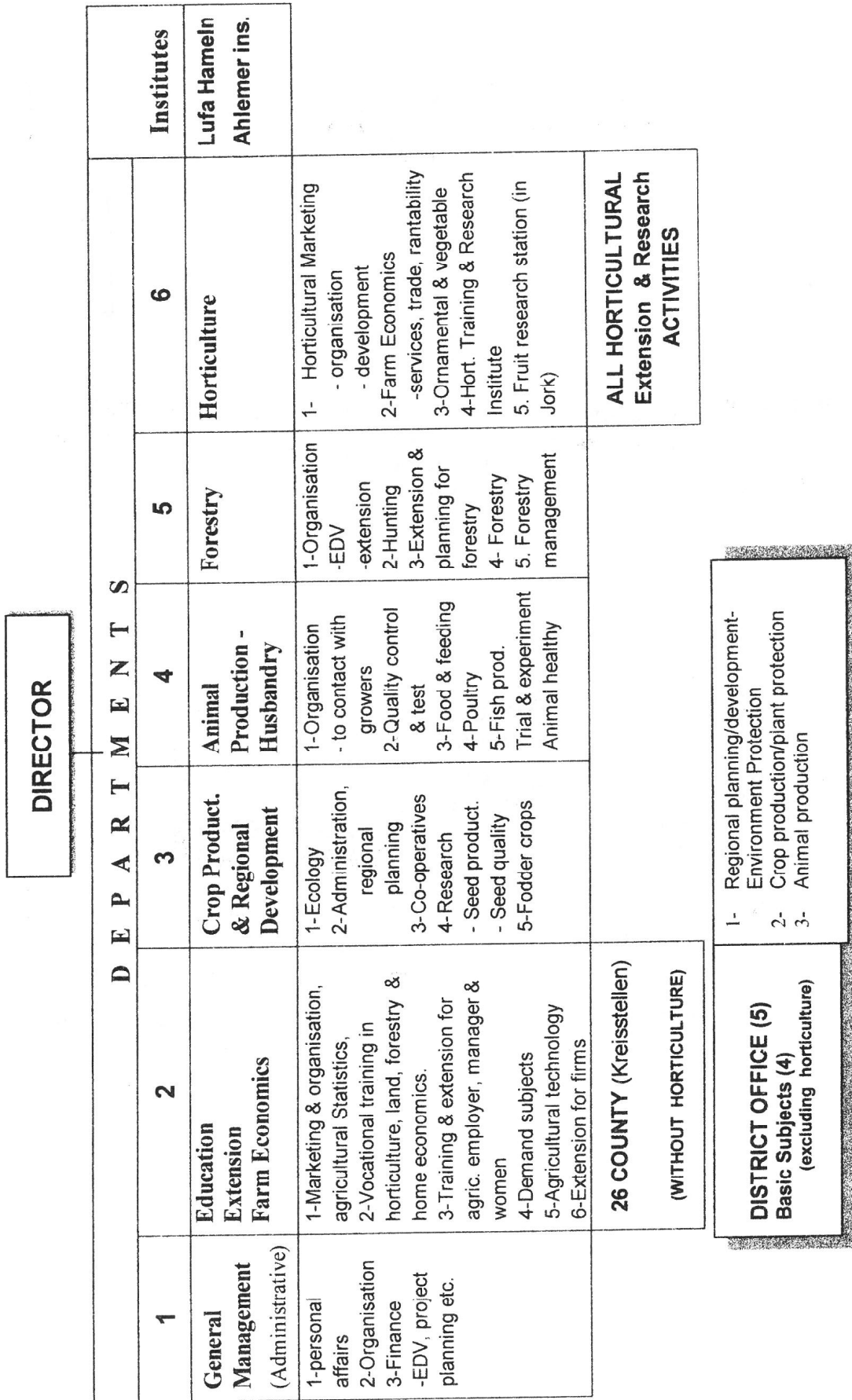


Figure 3. The organisation structure and extension organisation of the Chamber of Agriculture of Hanover.

4. General Extension Activities in Hanover Region

4.1. District Offices of Extension Service

District Offices of extension service is responsible for all agricultural crops excluding horticulture. The Chamber has 5 district extension offices (Bezirksstellen) which are Bremervörde, Brunswick, Nienburg, Northeim and Uelzen. Each district office has 30-40 staff and half of them are extension people. Rest of the staff is administrative people. The District Offices are supported by the County Extension Offices in the field of plant protection, crop production, animal husbandry-health, irrigation, environmental protection and the paper materials and audio-visual aid etc.

4.2. County Offices of Extension Service

Extension activities of the County Offices oriented to with agricultural production but excluding horticultural crops. The Chamber has 26 County extension offices. Each county office has two-five staff (Table 1). As can be seen from the table, the distribution of counties and number of extension circles were also given.

Every county extension office is responsible for the four main topics. There are some sub-topics under the main topics. The sub-topics can be changed according to need and characteristics of the regions. The four main topics are as follows:

- Farm economics: Agricultural investment, Finance, Management
- Home economics: Winter program and different subjects
- Vocational knowledge: Education in agriculture, expert in agriculture
- Socio-economic extension field: Changing

of decision and behaviour, Analysis of reducing risk, Socio-economic aspects, organisation of education.

Table 1. The distribution of counties and number of extension circle unit in Hanover region.

Number	COUNTY OFFICE (Kreisstellen)	Number of Extension Circle Unit
1	Kreis Celle	4
2	Kreis Cuxhaven	6
3	Kreis Diepholz	-
4	Kreis Gifhorn	5
5	Kreis Göttingen	1
6	Kreis Goslar	4
7	Kreis Hameln-Pyrmont	-
8	Kreis Hannover	7
9	Kreis Harburg	4
10	Kreis Helmstedt	1
11	Kreis Hildesheim	4
12	Kreis Holzminden	1
13	Kreis Lüchow-Dannenberg	1
14	Kreis Lüneburg	3
15	Kreis Nienburg	1
16	Kreis Northeim	2
17	Kreis Osterholz	2
18	Kreis Osterode	1
19	Kreis Peine	-
20	Kreis Rotenburg	7
21	Kreis Schaumburg	-
22	Kreis Soltau-Fallingb.ostel	1
23	Kreis Stade	10
24	Kreis Uelzen	5
25	Kreis Verden	1
26	Kreis Wolfenbüttel	2
Total		73

4.3. Extension Circle

As can be seen from Table 1, there are 73 extension circle units (Beratungsring) in the 26 counties. Every extension circle has a process and action unit. Hanover County Office is given as an example in Figure 4. It is seen from the figure there are seven extension circles in the Hanover County Office which is one of the largest office in the Hannover region. About 30-40 extension people work in

these extension circles (Rhein, 2000). Each extension circle consists of the around 600 farmers. The minimum

number of the farmers per extension worker is between 60 and 80 farmers.

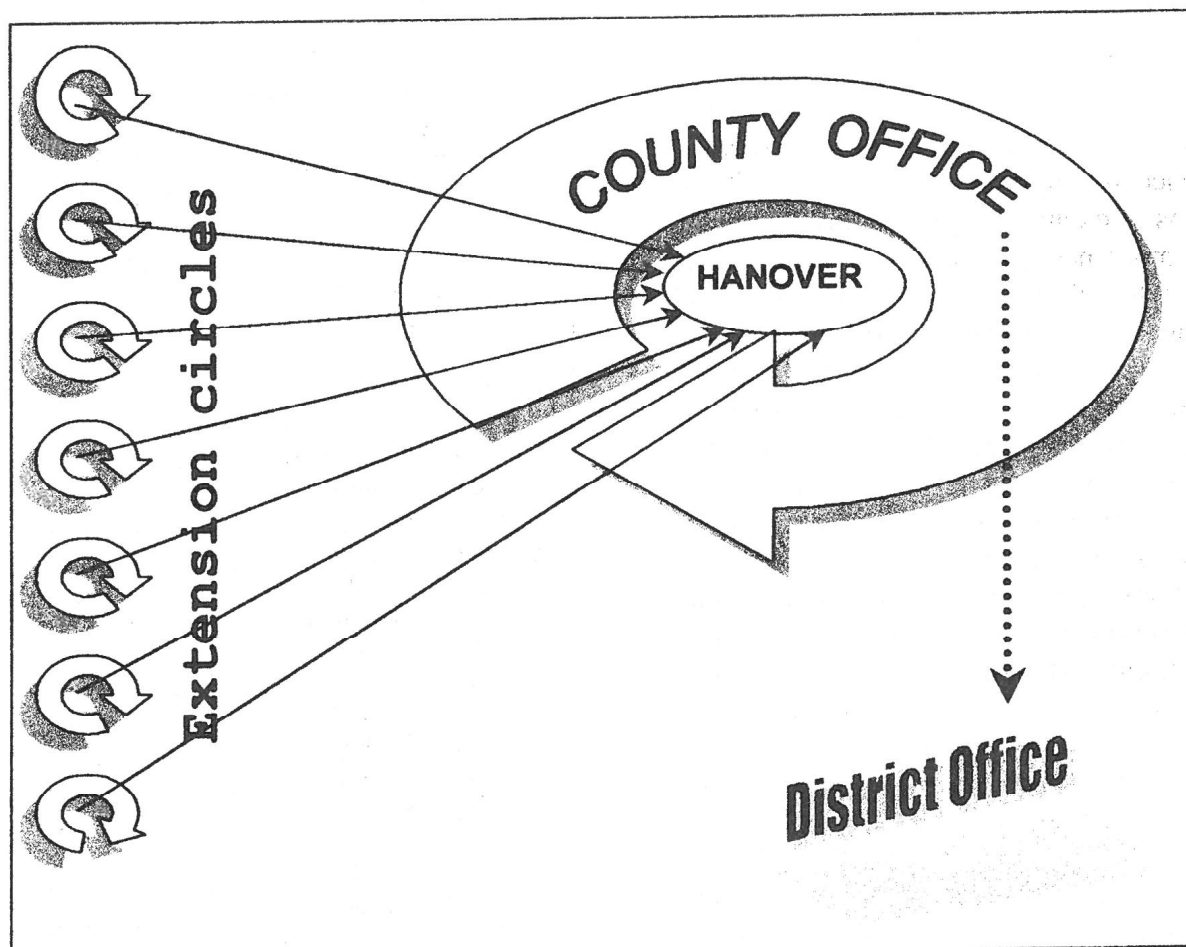


Figure 4. Hanover extension county office and extension circle units.

5. Horticultural Extension in Hanover Region

5.1. Target Area of Horticultural Extension

In this part of the paper, it is given some information about Hanover region. There are 5,419 farms which are larger than one ha in Hanover region. The share of Hanover region in Lower Saxony is 78,5 percent in term of farm number. The member number of the Chamber is 6,307 and about 47,8 percent of the member produces vegetables. The share of growers producing fruit,

ornamental plants, nursery and seedling is 27.1, 17.5, 7.1, and 0.5 %, respectively (Rhein, 2000).

The size of open area is 23,651 hectares.

The share of vegetable, fruit, ornamental plant, nursery and seedling is 44,7%, 45,9%, 2,7%, 6,6% and 0,1% respectively. The ornamental plants dominate (74.8 %) in the glasshouse production. The other crops produced in the glasshouse are vegetables (12,8%), nursery (11,6%) and seedling (0,8%).

5.1.1. Horticultural Crops Value

The value of horticultural crops is very high even though cultivated area of the crops is low. In fact this is an indicator of the production intensity. For instance, about 1.0 percent of total cultivated area was devoted to horticultural production but the contribution of these crops is 16 percent in the total value of agricultural crops.

It is well known fact that intensive production such as horticulture requires more knowledge compared to other agricultural crops. For this reason extension activities in the horticultural crops follow the different relatively approach comparing with the other agricultural crops.

5.1.2. Net Farm Income and Support Policy

It can be mentioned that there is a very close relationship between net income and agricultural support policy. In the line of agricultural policy, Federal government supports to horticultural growers.

Government support for Per hectare is equal to half of the agricultural crops value. It is therefore the value of the net farm income per hectare is the sum up the total of crop value and government support on the basis area.

5.2. The Function of Main Office

The Chamber gave a special importance to the horticultural production. Horticultural extension activities are planned and implemented by the Department of Horticulture, which is established at the main office of the Chamber. The role of the Department of Horticulture is very crucial for horticultural growers in the Hanover region.

5.2.1. Staff of Horticultural Department

Department of Horticulture of the Chamber has 130 staff of which 110 people are researchers and 20 people are extension worker. As can be seen in Figure 5, 10 out of 20 extension people work as a full time basis. They are permanently in the region and they have access to car. Full-time extension people try to determine grower's problems at the farm level and produce solutions to these problems. About seven out of ten full-time extension people work in fruit (orchard) production and three of them work in the ornamental plants. The remaining extension people work part time in extension and administrative works.

For example, two of the part time extension people work in vegetables. One of them is responsible for asparagus (spargel). Asparagus is one of the important crops in the Lower Saxony in terms of production, consumption and profitability. For instance, asparagus production area is 4,500 ha and net income of the asparagus is DM 80.000 for per ha while net income of field crops is DM 3.000-4.000.

Department of Horticulture has 12 units and 2 extension circles, which are called EDV-extension circle and Horticultural extension circle. The main task of EDV-Extension circle is to manage communication network and to provide connection between Department and horticultural growers. In the same time, this extension circle is to provide connection between the extension worker and researchers.

Regarding horticultural extension circle, there are five subjects in this circle. These are production, farm economics, marketing, extension and production marketing. There is a specialist for each subject in the extension circle. The main task of

horticultural extension circle is to solve problems of growers. If the problem can not be solved at the extension circle then

the problems are sent to research institutes.

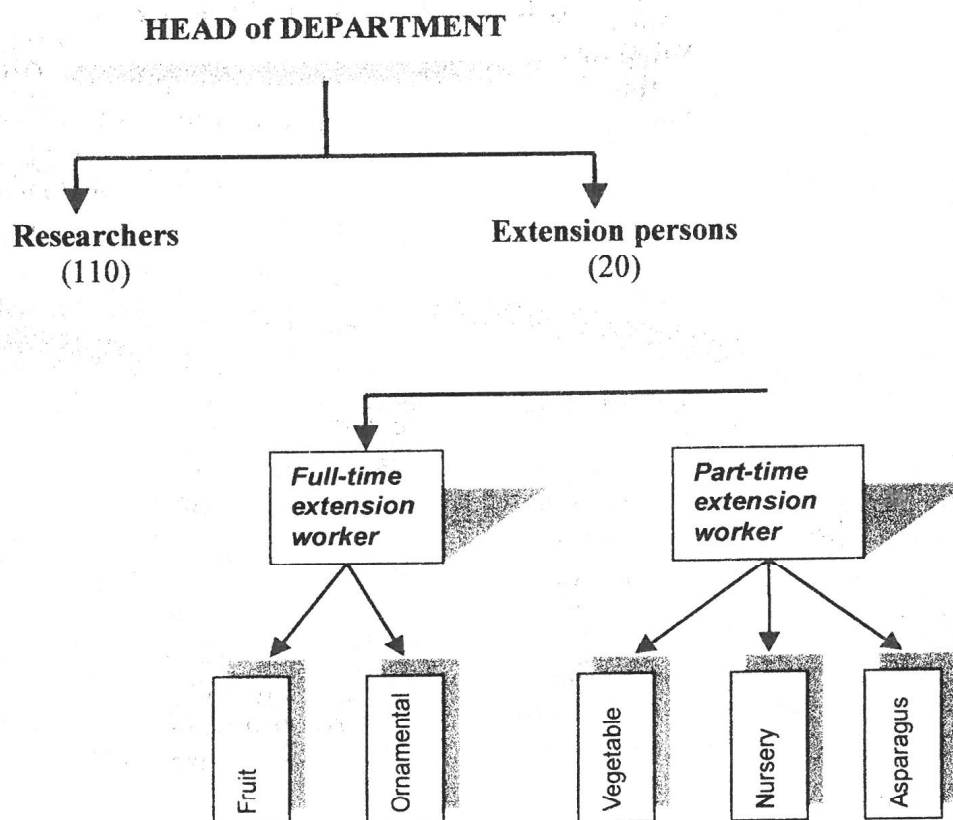


Figure 5. The distribution of staff in the Department of Horticulture.

The Department of Horticulture Units of the Chamber:

I. Head of Department of Horticulture

1. Nursery
2. Vegetable production, quality, water saving
3. Intensive vegetable production, seed production techniques-methods
4. Asparagus, field vegetable and asparagus
5. Horticultural production techniques-methods
6. Quality control of vegetables and fruits
7. Ornamental plants
8. Intensive information for employee on horticulture
9. Service productivity in horticulture
10. Farm economics and EDV
11. Retail trade and selling
12. Staff management

II. EDV -Extension circle

1. EDV -Extension- consultation

III. Horticultural Extension Circle

1. Production
2. Farm economics
3. Marketing
4. Extension
5. Production and marketing

5.2.2. Horticultural Research

University of Hanover and Ministry of Agriculture and the Chamber have horticultural research units in the region. However the most important research units belongs to the Chamber followed by the university and the Ministry of Agriculture.

5.3. *Training of Farmers Children*

By the Horticultural Department at the main office of the Chamber carried out training of farmers' children via internet and publications. For this purpose the Club of Farmers' Children was established which is known as PUK-Club (*). The Club always has a communication with its members. The main communication tools are PUK-Club Magazine and its web page.

This club targets farmer's children those of the between 5-11 years of age. Currently the club has 100.000 members and it organises various activities for the farmer's children.

The club organises courses lasting 2 months for the only ornamental grower's children. About 150 grower's children from the total 1108 ornamental farms located Hanover region are trained in 1990. Training topics are about the environment, agricultural and horticultural production. The aim of the courses is: disseminate knowledge to parents by the children trained in the horticultural production and to train candidate growers.

5.4. *The Strength of Linkage of the Chamber*

If we look at the strength of linkage of the Chamber with the others, the relationships between the Chamber and farmers show variation. As it can be seen in Table 2, the level of the relationships between the farmers and the Chamber is between ad-hoc and very strong. According to this strength of linkage of The Chamber of Agriculture of Hanover with relevant institutions are: The Chamber of Agriculture of Hanover has a very strong linkage with Ministry of Agriculture of Lower Saxony, Research Institutes of Ministry of

Agriculture of Lower Saxony, University of Hanover Foreign Research Institutes, Foreign Universities and Other Chambers of Agriculture in Germany (Table 2).

The Chamber also has a moderate strong linkage with Federal Ministry of Agriculture and Research Institutes of Federal Ministry of Agriculture (Rhein, 2000).

5.5. *Financial Structure*

The budget of the Chamber of comes from subscriptions, fees and state subsidies. Many specialists are demanded by the growers for extension work and training. Growers to the Chamber pay for these service.

About 75% of the Chamber budget was devoted to staff wages. Structural changes, retreat of farms out competition, changing of tasks of national administration will cause a feedback on the Chamber of Agriculture. As much as five percent or more of the farmers will quit annually,

Rhein (2000), point out that the activities of the Chamber must be evaluated seriously. The financing system will be one of the main considerations. The main question for the Chamber is: " what will be the farmer's demand tomorrow and which tasks or services can be provided more cheap and effective way (Rhein, 2000).

5.5.1. *Financial Support of Extension*

Ministry of Agriculture of the State of Lower Saxony has play very important functions. The Ministry of Agriculture gave also financial supports to the extension and research activities. Its contribution to the Chamber budget is about half of the total Chamber's budget. Ministry of Agriculture contributes about half of the total Chamber budget.

* Pfiffiges und Kunterbuntes rund um Pflanzen

Table 2. The strength of linkage of the Chamber with the others.

Strength of Linkage (relation)	Very weak	Weak	Ad hoc *	Mod. Strong	Very Strong
Farmers			X		X
Lower Saxony- Ministry of Agriculture					X
Lower Saxony- Research Institutes of Min. of Agr.					X
Lower Saxony- University of Hanover **					X
Federal Ministry of Agriculture			X		
Federal Ministry of Agriculture – Research Institut.			X		
Other LWK -Chambers of Agriculture in Germany					X
Private Research Institutes					
ZADI (DAI-net)		X			
DLG	X				
BMZ	X				
Foreign Research Institutes					X
Foreign Universities					X

Source: Rhein, 2000; ** Schenk, 1999.

* Ad hoc linkage was defined as research and extension interactions on an "as needed" basis no regular meetings are scheduled to discuss new technology or to routinely modify technical recommendations.

In the sake of this support, the Chamber conducts some research studies in its own research institutions and present the research results to Ministry of Agriculture. The remaining part of the Chamber budget comes from extension services paid by growers (20%), annual grower fee (subscriptions-30.4%) and the Chamber own contribution (4,5%).

Detailed figures about the Chamber budget were presented as below:

Table 3. The distribution of the Chamber budget.

Contributes	Total Value (1.000 DM)	The share (%)
Ministry of Agriculture of Lower Saxony State	70,153	45,1
Annual growers fees (subscription)*	47,399	30,4
Growers due (fee for extension service)	31,101	20,0
The Chamber own contribution	7,055	4,5
Total budget	155,708	100,0

Source: Rhein, P., 2000.

*) annual growers fee varies according to the crops and planting area. For example if one grower produce 10 thousand square meters

ornamental crops, he/she has to pay DM 2500 for the extension service in a year. If he produce vegetables in the same size area in this case he/she has to pay DM 1000 in a year.

5.5.2. Functions of Ministry of Agriculture in Extension

The most important functions of the Ministry of Agriculture in the non-governmental extension organisation system are as follows:

- to support financially to extension service
- to conduct Research-Development (R&D) as national and international levels through its agricultural research institutes and to disseminate of the results to related local units.
- to organise fair and exhibitions as national and international levels to introduce and disseminate of new technologies
- to act together with federal government to apply common agricultural policy (CAP)
- to develop national knowledge network and to prepare infrastructure to join with the inter national knowledge network
- The produce and storage of knowledge is realised by Federal Ministry of Agriculture, Lower Saxony Ministry of Agriculture and Chambers of Agriculture.
- to make and implement macro level plans
- to provide suitable atmosphere to the receivers during the extension services

5.6. *Paying System for Extension*

Extension people are responsible for the extension activities in their area. They visit one or two times in a week with respect to characteristics of the production season. During these visits extension people make observations and interview with growers. Thus extension people have opportunity to see problems and determine at the farmer level. Farmers have to pay membership fee (subscription) as annual basis to extension circle. The fees vary between around 1000-2500 DM in terms of characteristics of the production activity. In addition, farmers can apply to agricultural research institutes of the Chamber to be solved their specific problems. When the problems are solved farmers have to pay money to the institutes for this service

Besides these, farmers can ask the subject matter specialist (SMS) of the Chamber to deal with the urgent conditions. If the extension worker can solve the problem he/she has to be paid based on the spending time on the farm for solution of the problem. The fee is an hour basis is 130 DM. It is however that if the extension people can not solve the problem in this case farmers do not need to pay for extension people. Furthermore farmers can contact with extension people by telephone and internet or farmers visit the extension people in his/her office to demand agricultural information. In these cases again there is no need pay by the farmers to the extension people.

5.7. *Training of Trainers and Farmers*

The German training system in agriculture, especially practical training is based on the German dual training system. Training institutions are universities, technical schools, DEULA

institutes (Agricultural teaching centres), national and regional research institutes, etc.

One of the key factors in implementing extension is regular training that is fundamental to effective extension (Hayward, 1990). The regular training has very special role in the extension. In the Hanover region, training of trainers (extension staff) and farmers is implemented by the Chamber.

Training seminars oriented to farmers are organised in various topics. These seminars generally last 2 days but some of the seminars last one day or 3-5 days. Farmers have to register to participate these seminars and they have to pay seminars fee. For example, 37 seminars in relation to horticulture are organised between December 1999 and June 2000. The seminars are generally organised between January and February. Since between these dates agricultural activities are relatively low.

The topics of seminars are: crop selling, promotion, advertising, marketing, the program of Electronic Data Processing (EDV-Electronische Daten Verarbeitungs) for beginners internet-basic level, how to use EDV), tree and plant protection, Horticultural production techniques, Social security and working. Garden-Landscape building, Holidays formation for women, Student trip to international green week etc.

The seminar fee is 180- 668 DM for each participant. It is however that there are no seminar fee trip courses oriented to the student. Sometimes course fee is reduced to attract growers to participate in the courses.

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