Workshop 4

The resilience of small-scale farming systems in Europe in the context of globalisation.

DIVERSE LIVELIHOOD SYSTEMS AS A MEANS OF SURVIVAL AND RURAL DEVELOPMENT IN ALAGONIA, SOUTHERN GREECE?

EUGENIA PETROPOULOU
Research Associate, University of Crete Research Fund

Abstract

This paper deals with the concept of rural livelihood systems as derived from information gathered during a three-month fieldwork period spent in a mountainous village of southern Greece. Livelihood systems, in this case, are defined as the shared conception of a group of farmers concerning the best way they organise production within the agricultural sector and within limited area. Given the circumstances not one but several distinct conceptions develop over time. Farmers respond differently to the opportunities and limitations offered by the natural environment, rural extensionists, available technology, markets and EU policies. Any change in general agricultural policy, technology or markets does, in fact, generate new opportunities and new limitations, to which every farmer or group of farmers respond in their own way. Thus, a rural livelihood system refers simultaneously to the diversifying structure of the farm, daily management, farmers' diverse strategies and how these are perceived in a world of increasing global integration (Chambers and Conway, 1992).

This view, however, runs the risk of obscuring the role of farming systems research. The question is not how farmers can be helped to create more room for manoeuvre for themselves, it also concerns the direction which agricultural production and rural development should take. Rural development can be reinforced by collaborating with some farmers rather than others, but also by extrapolating research results to higher levels - farmers organisations, the regional public administration, the national government, the EU. In this way farming systems research can play a role in the supply of new limitations and opportunities and become politically involved.

This paper is structured around the farm level of analysis and concludes with some general considerations on the tactical and methodological requirements for farming systems research into Greek rural development. The case-study used has been drawn from the Greek situation.

Introduction

Alagonia is one of those Greek villages, which while apparently forgotten and certainly far from the centres of agrarian policy-making, holds nevertheless some internal dynamism. Alagonia falls into the prefecture of Messinia, southern Greece. It could and still can be easily described in terms usually used to describe marginalised villages, that is relatively isolated, lacking in socio-economic infrastructure, a local economy heavily dependent on agriculture, aged population and circular migration, and dominated by small-sized, highly scattered farm holdings.

In this paper I present some results of inquiry into the diversity of livelihood systems at the farm-household level in Alagonia. This diversity is analysed as the outcome of complex socio-economic processes and of the differentiated responses of farmers to recent policy interventions (Pretty, 1995). The empirical diversity in livelihood systems in this village

reflects, in my opinion, an important difference in underlying homogeneous development patterns. From these differences I hope to derive some suggestions on new forms of farming research intervention which might contribute to the straightening of local development.

Farming in Alagonia is generally based on animal traction, and farms, while diversified, are partly subsistence-oriented family enterprises. Since the sixties, a rapid depopulation has taken place, resulting in a highly ageing population. As a consequence of this process, the population decreased by 49.1 percent between 1951-1991 (ESYE, 1951-1991 Census). Towards the end of the seventies some relief was offered to the local farmers by potato growing making Alagonia one of the eleven Potato Centres of the country. After the country's accession to the EC accompanied by trade liberalisation and the suppression of state monopolies, the Greek Ministry of Agriculture could not function any more as the main regulator and distributor of potato-tuber production signalling thus, the closure of the village's Potato Centre in 1987. At the same time, since emigration had drained off much of the agricultural labour pool agricultural practices changed. The importance of arable farming (potatoes) steadily declined, giving way to livestock, agroforestry (chestnuts, cherries, olive-oil etc.), vegetable (tomatoes) and natural resources (herbs) production.

The above transformations allowed the development of complex livelihood strategies giving rise to social differentiation. Social differentiation in the past was based on the reproduction of large-scale farms and on farm labour. Today social differentiation in Alagonia is based upon a variety of criteria (see following sections as well). Property size remains crucial but criteria such as off-farm employment, age, education etc., are dominant. Farming, however, continues, to be diverse and complex, small-scale still productive and an appreciating asset.

Methodological Considerations

The contention of this research is that livelihood systems are not simply determined by natural, socio-economic and political environments rather, it is suggested that any change in general agricultural policy, technology or markets does, in fact, generate new opportunities and new limitations, to which every farmer or group of farmers responds in their own way (Ploeg, 1990). Empirical evidence in the case of Alagonia show that, farmers are far from a representative category of any farming pattern that statistical information provides, not only due to historical circumstances and current EU, state policies but also due to the cultural repertoires that are mobilised and used in the different farming practices.[1]

Let me illustrate this with the case of Alagonia, which was once famous for the production of potatoes, but is now increasingly defined as a village becoming steadily marginalised (e.g. closure of the potato centre, depopulation etc.). Nowadays the village seeks recognition for special help under the EU financed 'Less Favoured Areas' policy. Nonetheless, it appeared in the case of Alagonia that within a (at first sight) relatively homogeneous category of agroforestry farmers at least six farming or livelihood systems, could be distinguished (see following section). This diversity can in no way be ordered and classified in unilinear terms. Farmers themselves understand and order it in terms of different livelihoods systems. Diversification for them is not an at-random phenomenon: it entails specific clusterings. Each 'cluster', i.e. each 'way of farming', is the outcome of specific strategies handled by the

[1] It is indeed remarkable that in the blossoming attention given to local knowledge systems, considerable attention is paid to the way farmers classify their soils, their potatoes, their cattle etc., but very little is given to the equally important classification (one could even say 'folk taxonomy') which the farmers make between themselves (Leeuwis *et al.*, 1990).

farmers involved. In other words, the complex 'totality' of upland farming does not represent, at least for the farmers, a chaotic reality, a total confusion or not 'yet' completed transition towards 'competitive farming.' On the contrary it is a meaningful whole composed of many different systems. The latter are described in an everyday language that from a strictly academic point of view might seem hopelessly confusing, ambiguous and imprecise. But to the farmers themselves, this everyday-language is quite unequivocal. I refer to terms such as the 'cowman', "we have a little of everything" farmers, the 'young realist' farmer, 'vegetable growers and herb gatherers', the 'outsider' farmer, and the 'many-possession' farmer. For Alagonian farmers each term is an umbrella, a metaphor, linked to very precise, detailed and multi-dimensional discourses as opposed to the statistical information provided to describe agricultural characteristics by dividing the agricultural sector into several branches (e.g. dairy, pig, poultry, arable etc.)[2] (Leeuwis and Arkesteyn, 1991).

Accordingly, branch classification is related to both the prevailing conception that Greek economic interests are best served with an increased specialised farming sector, and the relative normative idea that a 'good' farm is a specialised farm (Centre of Planning & Economic Research, 1979). This pattern of organisation already existed and new ones, have been formulated along the same lines, i.e. research institutes, ministerial divisions, extension departments, service institutes etc. Although this classification may have contributed to institution building on an abstract level, at the same time it had encouraged the *invisibility* of farms and farmers that are not an integral part of this system since institutions support functions concerning activities on *specialised* farms (Ploeg, 1994). Therefore, no suggestions are made in relation to the integration of such functions on Alagonian farmers, which for example have both a flock unit and a chestnut unit and so on.

Alagonia was selected therefore, in such a way that diversity on variables such as orientation to agricultural production (olive-oil, agroforestry products, livestock etc.) and farmers' income generating activities, would be as high as possible. One can, therefore, argue that the relevant heterogeneity was satisfactorily covered by the village selected.

In Alagonia 26 farm households were studied in depth from a total of 98 using a questionnaire containing both open-ended and closed questions. The farm-household was taken as the basic unit of analysis while the questionnaire was mainly directed towards the head of the household (mostly male, but in some cases female). Information was gathered on household composition, agricultural and non-agricultural sources of income, farm's crop history, assessment of extension workers role, state and EU policies, participation in EU grants etc.

The research population is not completely representative of the village's agricultural structure. The study focuses on diversity in agricultural production and thus excluded farmers who were not actively involved in agriculture - in most cases small farm holdings with retired household members. For this reason, the average farm-size of the research population is considerably higher than the average farm size for the whole village (14.1 and 7.3 stremmata[3] respectively). Nevertheless, the farmers interviewed, reflected the diversity to be found among farm-households who intend to continue farming.

FARMERS' PORTRAITS IN ALAGONIA

[2] Compare Tables 2 and 3 in Appendix to see the differences between a typical farm, as described by agricultural statistics and a diversified farm developed from this research.

[3] 1,000[2] or 0.25 acres or 0.10 hectares. *Stremma* in singular number.

In this section I will discuss the specific characteristics and strategic notions (on the basis of survey material and qualitative information) that are associated with the different livelihood systems. First, I will present the different systems separately, and towards the end I will identify and summarise some more general insights (similarities and differences) that emerge. It is necessary to present each system in as much detail available because such details are a crucial part of the empirical evidence. Therefore, in relation to the survey, I am using the data concerning the 26 farmers. Subsequently, the most representative cases will be presented, since farmers categories are by no means entirely satisfactory and a lot of cases can easily fall into one, two or even three different categories. The information reviewed, displays a great diversity of livelihood systems (see also Table 3 in appendix) as these are characterised by a relatively strong emphasis on 'technical' and 'economic' parameters[4].

Table 1: Livelihood (farming) systems, the essence of the strategies that are related to them, and the types of the parameters that are considered to be important

	Essence of strategy	Types of parameters that are important
Cowman	cow raising and full-use of labour	technical
We have a little of everything farmers	self-sufficiency	technical
Young realist farmer	practical balance, through mixed farms, technology	technical
Vegetable growers and herb gatherers	vegetable production & dis-position to the local market	economic
Outsider farmer	monetary balance through off-farm employment	economic
Many possessions farmer	gaining a competitive adva-ntage over others	economic

The Cowman

The selection and characterisation of this category despite the small number of farmers (2 who own more than two cows each), was based on farmers care and special attachments to animals. According to the interviewee D.R., -from which this portrait took its title- " ... for me to take care of animals is like taking care of my children. You are probably there at the birth of most of them - it's nature at its best to see how they turn out."

Cowmen occupy on average 49 stremmata of land and fall into the medium farm category;[5] the number of cows (6) they own tend to be larger than other producers and make use of a high labour input and high levels of feeding (see also Table 3 in appendix). Their average age is 64 years, have a second branch that of goats while one of the two cases owns a pig branch

[4] By 'technical' parameters, I infer those that (even if they may be expressed in terms of money) are a direct expression of concrete farming/livelihood practices (e.g. intensive labour etc.) while 'economic' parameters can be less directly translated into concrete farming practices (e.g. income generating activities etc.).

[5] According to fieldwork data farms under 30 stremmata are considered as small-scale, farms from 31-70 as medium and over 71 stremmata as large-scale farms for the mountainous case of Alagonia.

as well. Regarding farming crops, they are considered amongst the smallest producers and are mainly pre-occupied with farming or livestock instead of seeking for off-farm employment. This of course can be determined by the age factor. Moreover, olive-oil fields account for 5 stremmata for each case and olive-oil is mainly directed for home consumption, with the only exception of cherry-trees where N.A cowman, owns 10 stremmata and D.R only 2.5 stremmata. Cherry produce is primarily destined to the market or to a local private industry. Both cases produce and buy in average large amounts of animal fodder, 2.8 and 4 tonnes respectively.

The cowmen in question, after the country's accession to the EC, contact occasionally with agronomists or veterinarians due to the bureaucratic burden placed on Greek extensionists. As they argue, state agronomists or veterinarians, or the information they provide them with is not specific enough to guide intervention at animal level nowadays; but still express a fair interest on public extension compared to the rest of the systems.

> "Discussing with veterinarians is indeed very important. But since they rarely visit us nowadays we have to experiment on our own. It is too risky to leave for example your cow under an udder infection, and go and find the expert in the city and convince him to come to the village. This takes time, and time is of value; so most of the time we ask for advice between ourselves."

Like the 'young realist' farmers, cowmen are relatively interested in the 797/85 EC-grants and seminars that deal with animal infections or diseases. In the case of seminars, D.R attended in 1989 one related to the fattening of cows and animal protection against diseases. This further justifies that extension facilities do not in reality provide enough guidance and intervention on emergency cases or on even everyday simple problems to animal owners making them rely on their own experience.

The "We Have a Little of Everything" Farmers

The "we have a little of everything" farmers try to farm in as economical a way as possible; this means that "I have a little of everything for subsistence while what remains from my total production I can sell it at the market place and earn some extra cash." According to P.C. this type of farmers also operate on smaller farms (on average 36 stremmata). All of them exclusively cultivate olive-trees and the majority is involved in agroforestry practices. Thus, 50 percent of the surveyed population in this category (6 out of the twelve cases) cultivate apart from olives, chestnuts, walnuts and cherry trees, an additional 33 percent are involved with the growing of chestnuts and cherries while two cases are exclusively involved with the production of olive-oil. A single case of the research population of this system owns a cow, while the rest declared of having one or two goats and a poultry unit directed only for home consumption and donkeys or mules for animal traction.

With an average age of 62.4 years, they are somewhat older than farmers of the rest livelihood systems and mainly constitute households of couples, since their children have left either to pursue an education or have found well-paid jobs in urban centres where they have settled. The explicit aim of these farmers is to create a self-sufficient farm in the *practical* sense, while monetary costs should be as low as possible; the idea is that money should not be *wasted*. This type of farmers often receive help from their urban-based children not only in the form of labour at harvest time but also in the form of information related to recent

agricultural developments. This may justify the weak link between this category of farmers and state extensionists (see Table 3). Despite this decrease of communication all farmers unanimously agreed that:

> " ... it is very important to get an overview of the results of this running year and discuss them with the state agronomist. The [state] agronomist used to take the initiative to visit himself our plots especially when we were growing lots of potatoes here, but now we have to call for him ourselves. Even if this is the case he still won't come!" (A.K.)

Although farmers of this category express a clear interest to be more involved with state extensionists like the cowmen, in practice they are much more involved with private agronomists despite the fact that they have to go and visit them at their stores.

Finally, the "we have a little of everything" group are full-time farmers with the exception of three cases, where a 62 years old farmer (D.R) was still employed at the time of the research by the Forestry department; P.R. 65 years old, is marketing on a daily basis his homegarden produce, such as potatoes and tomatoes and a 67 year old female farmer who owns a small haberdasher store which during summer functions as a coffee shop. It can be concluded therefore, that, despite their flexibility on farming and off-farming practices, state agronomists indicated that only a few of them could improve the efficiency of their farming operations due to a lack of interest on seminars, farmer magazines etc., and age (A.P. agronomist).

The Young Realist Farmer

The realist farmers (5 in number) tend to be younger farmers (on average 42 years of age) that run larger scale farms (on average 91 stremmata, 2 cows, 6 goats, 9 sheep, olive, cherry and chestnut trees etc.). Despite their growth in scale one would expect that they would belong to the most specialised system of farming. In reality no-one in Alagonia belongs to a specialised farm (branch) and even themselves [Alagonians] characterise their farmholdings of mixed style in terms of crops and animal units.

What actually gave the farmers of this group the characterisation of 'realists' was their notion "that good care of everything should run in order in every farm." They further argued, "you try to arrange things in such a way that optimal production is possible, and in order to do so you need to earn a bit of money even elsewhere from agriculture." This last proposition justifies the involvement of 80 percent of the realist farmers in off-farm employment since the majority of the them are employed on a seasonal basis from the forestry department, compensating thus with risk that the current productive year might bring.

The young realist farmers are oriented towards ongoing expansion and adjustment to the market. Thereby, they are guided primarily by external technological models such as the adoption of drip irrigation, small tractors for milling the terraced fields etc. (797/85 EC grant). Mechanisation is an important practical mean between technology and the market for the whole group which consequently helps them to maintain a competitive advantage over the other systems. This external orientation is further expressed in their attitude to market 80 percent of their olive-oil and 100 percent of their cherries and chestnuts.

Accordingly, the future prospects of the young realist farmers were evaluated in a positive way by themselves and state agronomists. It seems however, that the relation between young realist farmers and extensionists in general, is in a way not reciprocal. Only two cases, 40 percent reported that they regularly contact the agronomist while the rest 60 percent see him occasionally. Besides, the rest 60 percent seems not to enjoy working with private agronomists, unlike the "we have a little of everything farmers."

As argued by two young realist farmers "state extensionists are not so important if it comes to provide new ideas and information" (K.P.; D.T.).

> "Of course I consult them, [agronomists] like in case that my tomatoes were infected by a fungus, last year. But you realise that most of the times they are of little assistance to you. When I gave them (visited them), a sample of my infected tomatoes the response I got was that my tomatoes were damaged already and there was nothing I could do to stop this. I came back to the village and sprayed with *galazopetra* (copper sulphate). My tomato produce was saved and as for the agronomist could not stop asking me what I did to save them!" (D.K.).

Despite their orientation towards external models, this category like to keep control over things themselves. Moreover, it seems that they sometimes have the feeling that extensionists come in order to *get* rather than to *bring* information. According to the above extract, agronomists actually visit farmers when they want to gain insight on farmers practices, for example "what he did to save his tomato produce?" and farmers would then not see him again for some time. Farmers on the other hand, are not very keen on this situation. "In this manner" as they argue "it is not me who acquires knowledge and enriches farming practices but them!"

> " ... I do not say that close contact with state agronomists is useless, but it shouldn't end up with the situation that he comes and visits you in order to *get* rather than to *give* advice!" (D.T. 36yrs).

Young realist farmers have a relatively strong interest in a variety of sources as opposed to the rest of the systems. A relatively large number of them, 60 percent attend agricultural seminars and read magazines or leaflets distributed by the Ministry of Agriculture on related agricultural issues. It looks like that realist farmers try to adjust optimally to external technological models and the market.

Vegetable Growers and Herb Gatherers

This category does not need any particular introduction for its characterisation since it explicitly deals with farmers that are involved in the production of vegetables in general and tomatoes in particular, which products have mainly an economic orientation. This group start to take its form at the end of the 1980s and coincided with the closure of the Potato Centre in Alagonia and the rising importance of fresh fruit and vegetables by the early 1990s.

This category is constituted by two Alagonian women. Despite the fact that they are perceived as the 'breadwinners' of the household by the rest of the village, officially, only one of them is considered as the head of the household and that because she is a widow.

The vegetable growers are relatively old, 61 years old, and operate on smaller farms (average 42 stremmata). A.P. 61 years old belongs to the category of vegetable growers. After the death of her husband she took an active part in the vegetable production and she is considered by her village-fellows among the first people who owned a rural truck and the only woman who still drives a rural truck in the village. Her performance expands the territory of Alagonia. She also markets on her own the vegetables she produces, mainly tomatoes, potatoes, cherries and sells different types of herbs she gathers, at the market place twice a week. Despite her outstanding activities she very rarely comes into contact with either private or state agronomists. She justifies this by stating that:

> "I used to get more advice by state extensionists at the period where the whole village was cultivating potatoes. But now with the experience you gain through the years you know how the farm is put together. Anyhow, it is a waste of time to try to get an agronomist here, I'd rather ask for the help of my brothers in-law!" (A.P.).

A.P. finds that the usefulness of the state extensionists diminishes and in relation to this time investments become high. On the other hand, it is more convenient for her to seek for advice and help by her in laws.

The final case of this system is G.T. 61 years old, a vegetable and fruit grower as well as a herb seller. G.T. is not considered as the head of the household despite her husbands inability to deal with farming. She does not own any transportation means but her son always gives her a lift at the market in the nearby city where she sells, tomatoes, potatoes and herbs. She very often trades honey which her son produces. She is - and her family - are considered to be the largest honey producers in the village, they own over a hundred of bee-hives.

Similarly, with A.P., she almost never came into contact with a state extensionists but as argued she had very often asked for the advice of a private agronomist. Talking a little bit more with her on this issue, it was revealed that actually her son is responsible for the purchase of fertilisers and pesticides.

Hence, a remarkable picture emerges from the two cases of vegetable growers and herb sellers and their relation to either state or private agronomists. Both women are aware that state officials and consequently extensionists do not consider them as real producers, thus, the implementation of various projects or women's' marketing activities as described above, is overridden by cultural taboos. Women in their attempt to avoid mistreatment or even laughter for their activities outside the household domain, most of the time ask for the help of male relatives or male family members to avoid any unexpected situation that would humiliate them regenerating in this way the ideological underevaluation of women's work in Alagonia (*cf*. Lazaridis, 1995).

The 'Outsider' Farmer

The farmers who belong to this category are occupied with activities outside agriculture in order to balance their agricultural income They are considered as permanent residents of the

village since they sustain and cultivate their inherited land which most of the times helps for the generation of their urban household. The main reason for leaving the village seasonally is the acquisition of part-time jobs at the construction sites of the capital, while the family of C.O. and L.P., left because their children grew up and had to acquire a higher education.

The farmers of this group (4 in number) are relatively young in age (average 48 years old), and operate on medium farms, 47 stremmata on average. Only two of the four cases own a goat while P.K., 45 years old owns 35 bee-hives. The male vegetable grower I.P., (47 years old) is not a permanent resident of the village, he has a seasonal job in the city at the construction site and spends most of his time at the village at the beginning of summer when the cultivation of open air tomatoes commences. His farm unit can be characterised as a specialised one since he exclusively cultivates 10 stremmata of tomatoes. The rest 5 stremmata he owns, are occupied by products of agroforestry such as olive-oil which is mainly directed for home consumption including a few apple trees directed along with tomatoes for sale to the market.

L.P., who is considered as the most educated amongst the rest of this group is an electrician in the city on a temporary basis and is mainly preoccupied with agroforestry in Alagonia such as olive-oil, cherry-trees, chestnut trees and walnut trees. As he commented "as soon as the Potato Centre shut down, Alagonians turned to other types of farming such as cherries, chestnuts and tomatoes or even at the same time were looking for a part-time job outside agriculture like that in the Forestry department."

C.O., 53 years old is a construction employer and owns a mixed farm of 33 stremmata. P.K., 45 years old owns a little bit of everything plus 35 bee-hives as already mention, and works on a seasonal basis at the Forestry department. Apparently, this type of 'part-time' farmer, actively involved in the production of tomatoes, and agroforestry does not fit well the model of farming and farm development that state agronomists find most appropriate.

The relationship between the 'outsider' farmer and state extensionists is reciprocal, in that the former - relative to other farmers - seem to expect least from the latter (A.P. agronomist). Similarly, the 'outsider' farmer seems somewhat less interested in farmer magazines. Two cases reported that they rarely read this kind of magazines while the rest two seemed to do so occasionally. The state extensionists' assumption that the 'outsider' farmers' future prospects are more problematic than those of others, seems in fact to be shared by these farmers themselves. From the survey it emerged that they have less positive expectations than others in relation to the village's future viability and consequently their own. They tend to be uncertain about development opportunities, and show a great deal of interest in agrarian alternatives.

The 'Many Possessions' Farmer

"I want to feel secure, to obtain this I think that someone should have a good income. To obtain a good income you have to work hard and have different possessions in the local economy." Only one case of the surveyed population perfectly fitted this categorisation, although at a later stage of the research it was revealed that at least two more cases of this portrait existed in the village.

I.C., 57 years old, owns 103 stremmata of land and cultivates a variety of crops such as olive-trees, cherries, chestnuts, walnuts, potatoes, homegarden vegetables and owns on the other hand, 4 goats and makes full-use of his family labour. He is a trader, trades the produce of his

fellow farmers who lack transportation means and during the weekends at winter operates a coffee store, while at summer the same store functions as a tavern. This is the third type of income that supports his household after farming and trading.

The 'many possessions' farmer aims at the generation of household income through the above mentioned activities. He finds it thus, very important to adjust optimally to market demands. In this respect, he resembles the realist farmers. I.C., rarely contacts the state agronomists, is relatively sceptical or indifferent to various sources of information in particular extensionists. It seems that the lack of a clear technically defined model of farm organisation leads the "many possessions" farmer to a large variation therein, as opposed to the "cowmen" and "young realist" farmer.

Differences And Similarities In Alagonian Livelihood Systems

I have shown that differences emerge especially with regard to the parameters that different farmers focus on, the goals that are formulated vis-à-vis these parameters and the type of comparisons that are made on the role of state extensionists (see also Table 1). Thereby, it often appeared that there are plausible connections between the specific ways of dealing with extensionists, the different knowledge networks that farmers are part of, and the specific strategic notions that seem to underlie the different farming systems.

Parameters and the relations between them

It seems that the parameters that farmers focus on are clearly connected to the *nature* of the strategic considerations and goals that can be associated with the different livelihoods of farming. The strategies of the 'cowmen' (full use of labour), the 'we have a little of everything' farmers (self-sufficiency), and the 'realist' farmers (practical balance, through mixed farms, technology) can be easily translated into rather straightforward goals at the *technical* level. In relation to this, these farmers orient themselves especially towards specific technical parameters as already seen (see Table 1). From the strategic considerations of the 'vegetable growers' (production and disposition to the market) 'outside' farmer (monetary balance through off-farm employment) and the 'many possessions' farmer (gaining a competitive advantage over others) it is less easy to identify a clear-cut technically defined logic, which runs parallel to their stronger focus on *economic* parameters.

Still, 'vegetable growers', 'outsider' farmers and the 'many possessions' farmer too have technically defined goals, but these seem to *derive* from monetary or economic considerations; thus, they are -when compared to those found among farmers belonging to the other three livelihood systems- of less importance. The opposite holds for the 'cowmen', the 'we have a little of everything' farmers and the 'young realist' farmer. They start from technical goals, which -broadly speaking- shape their way of operating; although the financial and economic consequences of their practices cannot be ignored, they are -to a certain extent- a derivative rather than of guiding importance.

The foregoing can be summarised by stating that these particular parameters (e.g. technical, economic) do not alone define the variation between the six livelihood systems. The different knowledge systems each category shares and the diminishing role of state extensionists are along with these parameters few, but still valuable sources that help define diverse livelihood systems on the one hand while on the other, contribute to the articulation of endogenous, exogenous development. For example, encountering 'young realist' parameters, it can be argued that their agroforestry production is an illustration *par excellence* of endogenous development, not only because it relies heavily on the utilisation of local resources, such as

labour, but because it is also the model through which to filter decisions on whether specific 'external' innovation should be adopted (drip irrigation and small tractors for mountainous areas). If they fit, they will be integrated if not their utilisation becomes marginalised.

In addition, EC grants represent for several reasons an exogenous development pattern, particularly because of the selective way in which they are applied and the increased social differentiation they have created between rural households since the majority of farmers are excluded from these. A large percentage of this exclusion could be explained by a lack of skill on the part of state extensionists to develop investment proposals to fit the step-by-step approach preferred by farmers which also explains farmers' mistrust towards them.

Notwithstanding their limited access, EC grants are strongly present and often an important factor in the decision of each livelihood system to continue farming. Thus, the interpretation, evaluation and selection of parameters that clarify diverse livelihood strategies could be a starting point for Farming, Systems Research to enlighten the rural development agenda.

Conclusions

As shown in this paper, there are important differences in the extent to which the various livelihood systems reflect local or endogenous development. For example, EU funding programmes, diffusion of technical knowledge are primarily adopted by the 'realist' farmer group creating thus selectivity. Moreover, Farming Systems Research programmes need to be reoriented to the specific technological and agronomic problems and requirements of local livelihood systems of farming. The setting, therefore, of the research agenda needs to be done *with* farmers and not *for* farmers as is more common in current research programmes. In addition to the necessity for a reorientation of agricultural research agendas, the fields of extension programmes primarily reach a particular group of farmers (large scale) and have promoted an agricultural intensification strategy. Other farming systems (mainly mountainous) have been noticeably neglected. New clientele and fields of training should be envisaged. The results of this study point to several topics which could be used as a guide. Such topics might be:

- The integration of small-scale investment projects into FSR & Extension programmes. This would certainly lead to an increase in farmer participation and to a more proportional division of the funding between farm-households.
- Farm diversification and experimentation at farm level could be stimulated by on-farm research related to the utilisation of local resources, and consequently alternative products (berries, mushrooms, herbs etc.) adopted to small-scale production and the local ecological setting. This would also imply a rethinking of the dominant modernisation paradigm (increase productivity by external inputs), towards a policy which focuses more on the existing comparative advantages of the village or similar villages.
- Support for local initiatives demands specific conditions at the institutional level. Local rural development requires the predominance of local actors in local democratic decision-making, local control of resources and in the sharing of local benefits. An example is the Development Association of Kalamata (ADEK) which created in 1992, to define and implement strategies for disadvantaged mountainous villages of the prefecture, such as the maintenance of the local population the preservation of local varieties, landscape, alternative occupations etc. The Development Association is a clear example of an endogenous initiative that needs to be assisted and promoted.

- Local initiatives require, in many instances, new styles of intervention from state services agents, who were trained and socialised under a modernisation framework, in which strengthening local rural development, the building of local organisation and participation are elements that are mostly absent (Chambers, 1983).

Finally, the availability of information on markets, appropriate technology, forms of organisation and management, experiences elsewhere, funding and other support instruments is another critical ingredient that farming systems research should encounter. In fact it is not only important for farming systems research to take advantage of existing mechanisms, to seek synergetic effects and to fight for more appropriate measures and policy instruments. Action may lead to the importance of local institution building and to the capacity to influence decisions not only at the local or national level but also at the European levels.

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APPENDIX

Table 2: A Typical Farming System in Alagonia According to the 1991 Agricultural Census

Type of Crop	Area in Stremmata
Crops on arable land	544.0
Vegetables	140.4
Area under trees	1,945

Source: ESYE, Annual agricultural statistics of 1991.

Table 3: Characteristics of the Livelihood (Farming) Systems in Alagonia

Characteristics	Cowman (n=2)	'We have a little of everything' farmers (n=12)	Young realist farmers (n=5)**	Vegetable growers & herb gatherers** (n=2)	Outsider farmer** (n=4)	The many possessions farmer** (n=1)
Average:						
Farm size°	49.0	36.0	91.0	42.0	47.0	103.0
Olive trees*	5.0	9.0	20.2	11.0	10.0	11.0
Chestnut trees*	1.5	2.0	3.8	1.0	4.25	1.0
Walnut trees*	1.5	1.0	0.4	0.25	3.0	1.0
Cherry trees*	6.25	4.5	6.8	2.5	6.4	15.0
Apple trees*	1.0	-	0.5	1.0	0.25	-
Vegetables**	-	3.7	1.4	1.5	3.3	5.0
Animal fodder/ton.*	2.8	2.7	2.3	0.7	0.3	0.2
Potatoes*	1.5	1.0	2.8	1.0	1.25	3.0
No. of bee-hives	-	1.0	-	103.0	9.25	-
Number of cattle	6.0	1.0	2.0	-	-	-
Number of sheep	-	-	9.0	1.5	-	-
Number of goats	5.0	1.8	6.0	1.0	0.25	4
Number of pigs	2.0	-	-	-	-	-
Age of farmer	67.0	62.4	42.0	61.0	48.0	57
No. of household members	2.0	2.3	4.6	2.0	3.25	4.0
Use of:						
Labour exchange	100%	67%	80%	50%	50%	100%
State agronomist/ veterinary advice	occasionally	rarely	occasionally	rarely	rarely	rarely
Participation in:						
EU-grants	50%	-	60%	-	25%	-
Use of machinery+	-	-	20%	-	-	-
Income generating						

activities (cases)						
Bee-keeping	-	-	-	1.0	1.0	-
Selling herbs	-	-	-	2.0	-	-
Selling fruits/veget.	-	2.0	-	2.0	-	-
Construction worker	-	-	2.0	-	2.0	-
Seasonal forestry worker	-	2.0	4.0	-	1.0	-
Electrician	-	-	-	-	1.0	-
Trader	-	-	-	-	-	1.0
Coffee & tavern owner	-	1.0	-	-		1.0

Source: Developed from fieldwork data.

°In stremmata. *Area cultivated in stremmata. ** Mainly open-air tomatoes. *Refers to the case that the farmer produces his/her own fodder. +Drip irrigation. ** Members of these groups are employed to more than one occupation outside agriculture.