

The financing and orientation of extension services in Greece: a case study concerning rural youth

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Abstract: *Since its establishment, in the early 1950s, the Greek Extension service has undergone considerable changes. Especially after 1981, an administrative role has been undertaken as related to the implementation of the CAP. On parallel, in the international scene governments have started experimenting with various cost-recovery mechanisms for extension. Faced with such challenges, on both national and international levels, the current work intends to explore the willingness of young rural inhabitants to pay for advisory services. Based on data drawn from a large-scale survey, the current piece of work attempts to decompose the marginal effects of a series demographic, socioeconomic and spatial characteristics and information needs upon willingness to pay for extension. Furthermore, the malfunctioning of the Greek Extension Service in terms of both homogeneous and 'modernisation' orientation and its bureaucratisation and thus ineffectiveness satisfying current needs is critically discussed. Whether introducing a fee for service (since nearly half of the young farmers within current research claim willing to pay) or not, the Greek Extension Service must restructure following a rural systems approach.*

Keywords: *extension, cost recovery, will to pay, rural youth, Greece*

A snapshot of agricultural extension in Greece

Historical background

The Greek Extension Service was formally established in 1951. This was the first systematic attempt of the State in implementing an integrated advisory and training system for peasants. The basic aim of such an attempt was the re-organisation of the agricultural sector (in both productive and social terms) which was ruined after World War II and the following Civil War and resulted in shortages of basic food supplies.

During the 50's and the first half of the 60's, the Service was very effective in achieving its targets and this period is considered as the "golden age" of Extension in Greece. There was a massive and well co-ordinated mobilisation of the staff (agronomists) on the basis of well designed and coordinated extension programmes. During this period, extensionists seem to meet the ideotype of the "change agent". They performed an educational role explicitly aiming at changing farmers' attitudes towards modernisation with 'progressive farmers' constituting their primary target-group. The main characteristic of their work was a missionary attitude and popular image. The problems that extensionists had to tackle, despite being severe, were relatively easily solved by means of existing technical knowledge and the introduction of new/ improved inputs. As a result, the Greek agriculture attained self-sufficiency in strategic food crops by the end of the 1950s. In addition, with the establishment of the first Agricultural Training Centres all over the country in the early 1960s, agronomists were able to carry out their educational duties much more efficiently and effectively.

After the mid 60's the problems of the agricultural sector changed. The Extension Service was not prepared to tackle more complicated issues which implied not an increase of production *per se* but the restructuring of the sector in relation to policy and marketing considerations. In addition, the attitude of the Service towards its clients is transformed from having to work with peasants to having to deal with farmers. Hence, its perceived role also changes: the change agent gives way to the advisor. Farmers were expected to be able to deal with most of their problems without the assistance of the Service which provided advice, mainly of a technical nature, usually upon request. At the same time the Service, fulfilling the increasing administrative needs of the State (implementation of policies and subsidies) became largely engaged in bureaucratic tasks; extensionists were gradually transformed

into almost typical civil servants working in office. The vacuum created was partially filled by agronomists either working for private companies or establishing local commercial enterprises promoting, in both cases, all kinds of commercial inputs. As the time passed by, such agronomists become antagonistic to extensionists. Meanwhile, the Service, which had not established either organisational links with other major agricultural development institutes (i.e. Universities, Co-operatives) or organic links with the Research division of the Ministry, did not either attempt to co-operate with the private sector in creating an agricultural development network.

The contemporary setting

After the access of Greece in the EC (1981), the administrative burden of the Common Agricultural Policy (CAP) implementation was designated to the Extension Service. The new approach towards agricultural development required that Greek farmers had to become competitive entrepreneurs, both within the CAP framework and in view of the GATT negotiations. This implied the need for change of the Extension's role in order to detect and tackle farmers' and their wider environment's deficiencies which were perceived as obstacles to modernisation.

However, no major functional re-structuring of the Service took place; thus, extensionists did not escape from their bureaucratic - administrative role. Moreover, due to the lack of an adequate institutional framework (i.e. land and farmers' register), the duty of controlling the implementation of the CAP has been imposed on them; agronomists were assigned with the task to verify samples of farmers' statements regarding the acreage of subsidised cultivation through controls at local level. Therefore, extensionists became more than ever severely restricted vis-à-vis the provision of advice to Greek farmers; information was provided to those of the farmers who actively sought for it albeit in a rather fragmented, inadequate and inefficient manner. The huge working time devoted to the bureaucratic functions of the Service had as a consequence few extension programmes to be designed and implemented on the local level.

Changes, which took place in the mid 90s, such as Ministry's divisions' restructuring, decentralisation of services and the establishment of semi-autonomous organisations for training and research respectively did not have any substantial positive effects. Notably, decentralization, taken the form of the transfer of responsibility for agricultural services from the Ministry of Agriculture to Prefectures, did not either make extension services more flexible and relevant to the needs of farmers or triggered the establishment of farmer associations, co-operatives and groups which might take up the responsibility for the financing or delivery of extension services. On the contrary, it made the cooperation between the Ministry and the Prefectures rather more difficult due to conflicting interests of the two administrative levels. On parallel, the Service's educational function which had been restricted to short-term training (150-300 hours) in the local Agricultural Training Centres for those who were eligible for participation in the EU modernisation schemes (R. 797/85/EEC; 2328/91/EC) continued (under the new organisation) to address the same 'clientele' (R. 1257/99/EC). Despite the fact that some of shortcomings identified in the early steps of such training schemes have been tackled within the new training organisation the overall picture of occupational training in agriculture remains unsatisfactory¹.

Meanwhile, the Greek Extension Service operates within a more or less homogeneous development ideology focused on the topic of agricultural competitiveness in the framework of "productivist" agriculture. Therefore, the target-group is confined in the category of the "dynamic" farmers located in the plain areas; the information and training needs of other categories of farmers are largely ignored. The fact that there is considerable differentiation between plains and Less Favoured Areas (LFAs), along with the lack of research on alternative crops and enterprises, has resulted in the exclusion of farmers in the LFAs from the modernisation schemes which, in turn, endangers the socio-economic survival of such communities. The implementation of the (aforementioned) EU Regulations, as the main modernisation scheme employed, has had a major influence on such a way of thinking within the service. In addition, major environmental problems have recently been identified and attracted the attention of the general public; there is thus an urgent need to limit intensification in order to avoid irreversible damage.

In short, the Greek Extension Service has, during the last three decades, been in a painful process of bureaucratisation leading to its absence from the rural development field. In addition, the Service's

¹ As revealed by a series of undergraduate theses conducted in the Agricultural University of Athens under the supervision of A. Koutsouris.

homogeneous development policy and ideology has actually been operating a limited 'progressive farmer strategy'. Under such a mode of function the Service has not been able to provide adequate service to farmers in terms of either agricultural or rural development. This has been verified by a number of studies which attempted to detect what the situation is both in terms of farmers' perceptions about the Service's interventions as well as, in terms of the intervention policy and practice of the Service (Koutsouris, 1999). Today, the inertia of the bureaucratic mechanism leading to the provision of inadequate services to farmers, especially in the LFAs, has further serious socioeconomic and environmental consequences.

The International scene

For a long time the public sector has been the key provider of extension services. This has been justified on the basis of broad national policy issues, the understanding that the information relevant to technological innovation is a public good, the risks involved in agricultural production, the limited access to information of highly scattered and heterogeneous farming populations, regional imbalances and the need to maintain the quality of agricultural production inputs.

Nevertheless, since the 80s such a role has been challenged; an extensive debate about the role of the public sector in the provision of agricultural extension services thus emerged since then (Rivera and Schram, 1987; Rivera, 1990, 1997 & 2000; Rivera and Gustafson, 1991; Cary, 1993; Farrington, 1994 & 1995; Phelan, 1995; Carney, 1996; Dinar, 1996; Haug, 1999; Van der Ban, 1999 & 2000; Hoffmann et al., 2000; Kidd et al., 2000; Rivera and Zijp, 2002; Garforth et al., 2003; Rivera and Alex, 2004; Klerkx et al., 2006). Public agricultural extension has been found to suffer from shortcomings such as incurring high and unsustainable costs, poor coverage and performance, lack of responsiveness (and accountability) to the variation of farmers' needs and changing contexts, the inefficient use of new communication tools, poor human resource development and methodologies as well as extension's usually narrow (agricultural) mandate vis-à-vis the pragmatic need for (sustainable) rural development. Moreover, political reforms have put considerable pressure upon public sector extension services. According to Rivera (1996): *'the forces for worldwide structural adjustment as a result of massive debts by nations north and south, the onslaught of conservative ideology emphasising efficiencies over welfare, the accelerating reaction against subsidies in agriculture - these are all reasons for the critical assessment of extension'*

Therefore, many countries started implementing and experimenting with different processes (decentralisation, cost-sharing, cost-recovery and participation of stakeholders in development initiatives) in the provision of agricultural extension services, the central rhetoric being that farmers should obtain the information they need from those best suited to do so. The common grounds of such processes are the changing conceptualisation of farmers (beneficiaries to users to clients), a change of the public sector's role (from provider to stimulator of a private market of advisory services) and the (partial or full) financing of the service provider by the client.

In developed countries reforms focus on economic efficiency, cost recovery and demand-driven supply via privatization or commercialisation; these reforms are based on the premises of the dominance of commercial production systems and the decline of the farming population. Commercialisation implies a public service concurrently with the application of user charges for some services (whilst other services may remain public). On the other, privatisation implies the full transfer of ownership from government to a private entity. In both cases, farmers are supposed to be able and willing to pay for services and goods - which thus have private good characteristics. At the same time, issues, such as 'who should pay', 'which services' and 'how much', arise and become extremely important. In general, small farmers are likely to have less incentive to pay; buyers are likely to be market-oriented, profit-making medium and large farmers. In this respect it has also to be taken into account that similar reforms in health, education etc. put considerable pressure on farmers' financial resources and affect their willingness to pay for extension. Thus, for Rivera (1997), such reforms imply either a shortage of poor, small farmers or a decision not to serve them. Further to this, underinvestment by research and extension in 'public good' topics is a major topic.

On parallel, the international experience shows that there is an emerging view of extension which is no longer that of a unified service; the increasingly complex market, social and environmental demands within an increasingly diversified agricultural sector lead towards a more sophisticated and differentiated set of services. The key issue here is finding the appropriate mix of public and private funding as well as delivery mechanisms to serve diverse target populations. Mainline extension

services thus give way to a variety of hybrid solutions, combining public support with private delivery methods. Cost-sharing, voucher and cost-recovery programmes are seen as appropriate in making extension services more demand and client-oriented. Within such a context, the state, on the one hand will have to promote the public interest and assure social welfare by ensuring the delivery of specific services (i.e. basic occupational education and training, pilot programmes regarding societal issues, such as the conservation of the natural resources, assignments in remote areas, unattractive subjects and work with the most disadvantaged groups etc.). On the other, it has to define and implement a coherent policy vis-à-vis a pluralistic system and its financing and put in place 'safeguarding instruments' in order to control the nature and quality of private extension which, though, may call off the benefits of privatisation.

Again, topics such as who is served and whose needs/demands are most clearly articulated, determining a fee for extension delivery as well as choosing direct or indirect (via the user) financing of extension providers are central and difficult to solve. Furthermore, farmers have to know their rights and be organised to defend them; otherwise, such systems may well be open to manipulation by private providers and powerful farmers and thus, once more ineffective. Moreover, private providers may well function within a top-down, linear model which in the face of new approaches to innovation and extension is outdated.

Young rural inhabitants and extension in Greece

Faced with such challenges, on both national and international levels, the current work intends to explore the willingness of young rural inhabitants to pay for advisory services. The main objective is to empirically identify which characteristics make young people in rural areas to be more, or less, favourable towards paying in order to obtain occupational information and advice. Such an analysis is deemed necessary since in order to develop or deliver a service, among others, an understanding of the needs and interests of the target-group(s) is required. The focus of the current paper on the young rural generation (18-45 years old) is justified given the specific socio-demographic characteristics of the ageing, thus requiring renewal, rural population in Greece. To carry out such an analysis, a series of data concerning demographic, socioeconomic and spatial characteristics and information needs are examined in order to decompose their marginal effects upon willingness to pay for extension. A number of relevant explanatory variables is thus processed utilising a Probit analysis framework. Data were drawn from a large-scale survey concerning young rural inhabitants in 7 out of the 52 Greek Prefectures. In order to take into account the heterogeneity of rural Greece, a multi-stage proportional stratified random sampling procedure was employed based on census data (Census 2001, NSSG). The target group comprised of 916 young rural people. Data were collected through personal interviews on the basis of a structured questionnaire; 853 completed questionnaires (i.e. 91.4% of target) were used in the analysis that follows.

Key Characteristics of the sample

The sample comprises of 65.5% men and 34.5% women; 63.9% have farming as their main occupation while the categories of self employed and private sector employees are represented with 12.2% each; the remaining 11.7% is distributed in one-figure percentages among civil servants, other professions or housewives. Nevertheless more than $\frac{3}{4}$ of the non professional farmers are also engaged in agriculture - as a secondary activity. Following analysis will address both the total sample and the farmers' subsample.

The average age in the sample is 39.1 years and the most populated age-group is the 41-45 years one (38.9%) followed by that of 35-40 (27.9%). This distribution does not change significantly within the farmers subsample.

46.2% of the sample resides at a plain – dynamic area, 32.3% in LFAs and 21.5% in mountainous ones. Furthermore, 43.1% have higher secondary education and 22.9% have lower secondary education with another 6.5% having higher education degrees, which leaves 27.9% of the total with only elementary education. However, the picture for the farmers is different: 33.1% have elementary education and only 2.4% have obtained a higher education degree. Nevertheless, still 4 out of 10 farmers have had higher secondary education.

Young rural inhabitants were found familiar with technology (the use of cell phones, tv and radio exceeds 90% of the total); 26.1% for the total and 19.5% for the farmers use PCs and most of them

have Internet access (77.0% for the total and 66.0% for the farmers). On parallel, face to face contacts with locally and/or regionally based services and institutions remain extremely significant. Thus, more than 50% for the total sample and more than 60% of the farmers turn to the Union of Co-operatives or the local Co-operative for information. An equally important information source for the 45.6% of the total sample (53.3% of farmers) is the Department of Rural Development, while another 29.4% (34.6% of farmers) contact local agronomists-extensionists. Their information interests focus much more on technical (farming) topics along with issues concerning the EU grants and subsidies rather than management and marketing; topics considered not to relate to farming (re: rural development/new off-farm activities) are the least in importance.

While the aforementioned contacts refer to the available sources of information in rural areas, they do not necessarily cover all relevant needs; more than 60% of the young farmers ignore the main programmes employed in Greece ('young farmers' programme and 'farming modernisation' schemes). Given an increasing understanding (72.6% of the total; 77.8% of farmers) that nowadays farming requires specific knowledge and skills rural youth, almost unanimously (>90%), stated that they would certainly like to have access to an advisor in order to receive guidance when facing a problem or to be presented with alternatives among which to choose. However, only 42.2% of the total and 47.9% of farmers showed a will to pay in order to have access to such advisory services. In order to delineate such an attitude further analysis, utilizing the probit model, followed.

The Probit Model

A Probit model deals with a choice between two alternatives (Greene, 2000). It quantifies the relationship of the probability (a number between zero and one) to various characteristics. The Probit model uses the functional form

$$Pr ob[y_i = 0] = 1 - \Phi(x_i\beta)$$

Where $\Phi(\bullet)$ is the cumulative normal distribution; that is, $\Phi(z)$ is the probability that a random variable with a normal distribution, zero mean, and unit variance does not exceed z . The dependent variable is not a continuous but a dichotomous binary variable. The probability depends on a vector of independent variables (x_i) and a vector of unknown parameters β . The task of estimation is to find the best values for these parameters. Since $x_i\beta$ has a normal distribution, interpreting Probit coefficients requires thinking in the Z metric. The interpretation of a Probit coefficient, β , is that a one-unit increase in a predictor leads to increasing the Probit score by β standard deviations. Estimation of Probit model is attained by maximizing the likelihood function. The maximization requires an iterative method, but in most cases it operates smoothly, because the Probit functions are very well behaved. Goodness of fit and inferential statistics are based on the log likelihood and chi-square test statistics. The dependent variable in the following probit models is the willingness to pay for advisory services. Thus, a binary dependent variable, taking on a value of 1 if the respondent is favourable towards paying for advice and 0 otherwise, was used. The tentative explanatory variables comprised both continuous and binary variables, as shown in Table 1.

Results

Results of the probit model for the total sample

The Probit model was estimated using a standard maximum likelihood approach. The maximum likelihood estimates of the Probit model are presented in Table 2. Results indicate that 72 percent of the observations were correctly predicted (Table 2.1). The overall model is significant at the 0.0000 level according to the Model chi-Square Statistic (246.700). The McFadden R^2 , defined as 1-minus the ratio of the unrestricted to restricted log-likelihood function, is 0.2130. Both goodness-of-fit measures indicate that the Probit model performed reasonably well, considering the cross-sectional nature of the data. Marginal effects indicate the effect of one unit change in an exogenous variable on the probability of willingness to pay for mentoring.

Table 1. Definition of variables used in the probit model

Variable	Description
Dependent	
Payment	Willingness to pay for information-advice? 1 = Yes , 0 = No
Independent	
Gender	Male = 1, Female = 2
AGE35	Age < 35 years old
Educ	Years in school (all levels)
Farmer	Occupation: 1 = full time farmer, 0 = other
Computer	Computer use: 1 = Yes, 0 = No
Farmer2	Would you now choose farming as your main job? 1 = Yes, 0 = No
FarmDec	Who is taking the decisions at the farm? 1 = Owner, 0 = other
Farm Plans	Plans to expand your farming business in the next five years? 1 = Yes, 0 = No
Advice	Need for advice: 1 = Yes, 0 = No
Mount	Dummy; equals 1 if the area is mountainous
Lessfav	Dummy; equals 1 if the area is less favoured
Plain	Dummy; equals 1 if the area is flat
Action	Interest in collective action? 1 = Yes, 0 = No
CAP	Awareness of the new agricultural policy requirements: 1 = Yes, 0 = No
Income	Income more than 12.000 € equal to 1, else=0
Crops	Main farming activity is plant production, 1 = Yes, 0 = No
Animals	Main farming activity is animal production, 1 = Yes, 0 = No
	<i>Information-advisory needs for a farmer today ...</i> (Dummy variables indicating the highest interest - i.e. 5 on a 1-5 scale - on relevant information)
X1	-New cultivations
X2	-Organic/quality farming
X3	-New farming techniques
X4	-Pesticides/fertilizers/feedstuff
X5	-New machinery and equipment
X6	-Farm accounting/records keeping
X7	-E.U. subsidies and compensations
X8	-E.U. programs (Young farmers, investment/modernisation schemes etc)
X9	-Markets and prices
X10	-Environmental protection
X11	-Marketing of produces/products
X12	-Farm management
X13	-Risk management
X14	-Ways of financing agricultural enterprises
X15	-New forms of cooperation/ collective actions
X16	-Off-farm activities
X17	-Taxation and legal issues

The analysis shows that professional farmers (Farmer1) are 20% more likely to pay for advisory services in comparison to other professionals. An almost equally positive attitude is expressed by those who have plans to expand their farming business within the next 5 years (FarmPlans; marginal probability: 17.8). The probability to pay is 13.5% higher among those who recognise the necessity of an advisory service in rural areas (Advice) and 10,3% higher for those who are aware of the new CAP requirements (CAP). Willingness to pay further relates with higher incomes (income; marginal effect: 13.1%). Finally, PC users are more likely to accept to pay for advisory services (Computer; 10.0%).

All three location variables (Plain, Lessfav and Mount), bear a negative sign and have a highly significant effect on willingness to pay (marginal effects: 39.4%, 38.6% and 25.5% respectively); it follows that the more remote and disadvantaged a rural area is the less opposite and negative toward the possibility of paying young inhabitants are.

Young men are found to be by almost 17% less likely to pay for advisory services (Gender), as is also the case for farm managers (decision-makers – FarmDec; -17,8%) and older respondents (Age; -8,8%). Willingness to pay is found to be negative for those who consider knowledge in topics such as EU subsidies (X7; -21.7%), inputs (X4; -13.5%) as well as taxation and legal issues (X17; -11,0%) very important. On the other, a higher probability of paying appears for those who consider topics such as new machinery and equipment (X5; 15.3%), new farming techniques (X3; 12.9%) and marketing (X11; 10.8%); as well as the protection of the environment (X10; 12.0%) and the EU agricultural development programmes (X8; 14.4%) as most important.

Table 2. Estimation results for total sample

	Coefficient	Standard Error	Marginal Effects	Standard Error
Intercept	0.2335	0.3732	0.089	0.1435
Gender*	-0.4387	0.1278	-0.168	0.0489
Age35**	-0.2312	0.1207	-0.088	0.4634
Educ	-0.0499	0.1119	-0.019	0.0429
Farmer1*	0.5217	0.1469	0.200	0.0562
Computer**	0.2618	0.1191	0.100	0.0457
Farmer2	-0.2092	0.1445	-0.080	0.5544
FarmDec*	-0.4165	0.1259	-0.159	0.4829
FarmPlans*	0.4660	0.1178	0.178	0.4531
Advice**	0.3538	0.1904	0.135	0.0728
Mount**	-0.6665	0.2615	-0.255	0.1007
Lessfav*	-1.0081	0.2595	-0.386	0.1001
Plain*	-1.0265	0.2544	-0.394	0.0981
Action	0.2080	0.1113	0.079	0.0427
CAP*	0.2694	0.1160	0.103	0.0445
Income*	0.3425	0.1087	0.131	0.0417
Crops	0.1511	0.1356	0.057	0.0523
Animals	-0.1361	0.1623	-0.052	0.0623
X1	-0.1541	0.1516	-0.059	0.0582
X2	0.0555	0.1488	0.021	0.0571
X3**	0.3380	0.1515	0.129	0.0581
X4**	-0.3525	0.1536	-0.135	0.0589
X5*	0.3989	0.1476	0.153	0.0566
X6	0.1310	0.1498	0.050	0.0575
X7*	-0.5677	0.1667	-0.217	0.0637
X8**	0.3758	0.1566	0.144	0.0599
X9	-0.0622	0.1499	-0.023	0.0575
X10**	0.3141	0.1386	0.120	0.0531
X11**	0.2824	0.1605	0.108	0.0616
X12	-0.1173	0.1727	-0.045	0.0663
X13	-0.0591	0.1503	-0.022	0.0577
X14	-0.0075	0.1499	-0.002	0.0575
X15	0.0957	0.1531	0.036	0.0587
X16	-0.0399	0.1403	0.015	0.0538
X17**	-0.2867	0.1625	-0.110	0.0624

* significant at the 0.01 level, ** significant at the 0.05 level

Table 2.1. Predicted accuracy of probit model for total sample

Actual	Predicted		Total
	0	1	
0	408	91	499
1	145	209	354
Total	553	300	853

Results of the probit model for farmers

For the analysis of the farmers' subsample the Probit model was, again, estimated using a standard maximum likelihood approach. The maximum likelihood estimates of the Probit model are presented in Table 3. Results indicate that 69 percent of the observations were correctly predicted (Table 3.1). The overall model is significant at the 0.0000 level according to the Model chi-Square Statistic (140.33). The McFadden R^2 is 0.1760. Both goodness-of-fit measures indicate that the Probit model performed reasonably well, considering the cross-sectional nature of the data. In this case, too, marginal effects indicate the effect of one unit change in an exogenous variable on the probability of willingness to pay for mentoring.

The results of the second analysis lead, more or less, to the same picture as revealed for the total sample. Thus, all the variables but five (Age, Advice, CAP, X3 and X10) identified as influencing willingness to pay, either positively or negatively, in the total sample are found as being significant within the farmers' subpopulation, too. For some variables, however, there seems to be now a more clear effect on the depended variable. For instance, farmers that are interested in EU rural development programmes (X8) turned out to be 29.0% more likely to pay for advisory services, while these who are interested in issues related to the marketing of farming products (X11) have a 22.0% higher probability of paying, which is twice as high as the effect predicted for the total sample. Finally, farmers in the plains areas appear holding a more negative attitude especially as compared to the ones in mountainous areas (Mount; -20.2% and Plain; --43.6%).

Table 3. Estimation results for farmers

	Coefficient	Standard Error	Marginal Effects	Standard Error
Intercept	0.9874	0.4870	0.3928	0.1940
Gender**	-0.4561	0.1826	-0.1814	0.0726
Age35	-0.1443	0.1495	-0.0574	0.0594
Educ	-0.0115	0.1403	-0.0045	0.0558
Computer**	0.3416	0.1622	0.1358	0.0645
Farmer2	-0.1939	0.1534	-0.0771	0.0610
FarmDec**	-0.3193	0.1714	-0.1270	0.0682
Farm Plans*	0.4214	0.1381	0.1676	0.0549
Advice	0.0874	0.2348	0.0347	0.0934
Mount***	-0.5082	0.2996	-0.2021	0.1192
Lessfav*	-0.9466	0.2973	-0.3765	0.1184
Plain*	-0.1096	0.2906	-0.4361	0.1157
Action	0.1736	0.1387	0.0690	0.0551
CAP	0.1592	0.1351	0.0633	0.0537
Income**	0.3424	0.1387	0.1362	0.0551
Crops	0.2592	0.1679	0.1031	0.0667
Animals	0.0284	0.1917	0.0113	0.0766
X1	-0.2954	0.1927	-0.1175	0.0537
X2	-0.0777	0.1820	-0.0309	0.0724
X3	0.2358	0.1867	0.0938	0.0742
X4**	-0.4538	0.1968	-0.1805	0.0782
X5*	0.4650	0.1869	0.1849	0.0743
X6	0.1610	0.1943	0.0640	0.0773
X7*	-0.5466	0.2244	-0.2174	0.0892
X8*	0.7217	0.2090	0.2871	0.0830
X9	-0.0764	0.1884	-0.0303	0.0749
X10	0.1698	0.1778	0.0675	0.0707
X11*	0.5664	0.2153	0.2253	0.0856
X12	-0.3388	0.2210	-0.1347	0.0879
X13	-0.0510	0.1927	-0.2032	0.0766
X14	-0.1413	0.1990	-0.0562	0.0791
X15	0.7852	0.1953	0.0312	0.0776
X16	0.2286	0.1727	0.0090	0.0687
X17***	-0.3430	0.2050	-0.1364	0.0815

* significant at the 0.01 level, ** significant at the 0.05 level, *** significant at the 0.10 level

Table 3.1. Predicted accuracy of probit model for farmers

Actual	Predicted		Total
	0	1	
0	214	72	286
1	96	162	258
Total	310	234	544

Discussion and conclusions

Survey data show, in the first place, the importance of farming for young rural inhabitants (18-45 years old) along with the felt need of more than 90% of them for advisory services as well as the willingness of around 42% of them to pay for such services. Analysis implies that more positive towards paying are, in general, the farmers, the younger, the wealthier and the PC users. This is also true for those rural inhabitants who are knowledgeable of the CAP reform as well as those who consider topics such as farm mechanisation, EU (farming-related) programmes, new farming techniques and marketing as well as on environmental protection of utmost importance.

Farmers express an impressive need for advisory support, with almost half of them willing to pay for service. Among them, males, decision-makers and those with farms in plain areas appear less willing to pay for extension services; previous studies have shown (see: Koutsouris, 1999) that farmers combining such characteristics are the privileged clientele of the Greek extension service. Concurrently, negative attitudes are shown by those who consider as mostly important the information on subsidies, inputs and taxation and legal issues. The fact that information on subsidies is available to those with good contacts with the extension services, while information on inputs is available mainly through private agronomists may well support previous findings as well. As far as the need for information on taxation and legal issues is concerned on the one hand is not considered as very

important by most of the farmers and on the other it can be argued that those who need it would like to acquire it for free as happens with information on subsidies and inputs.

On the other, those with plans to expand their farming business, those with higher incomes and computer users as well as those seeking information on issues such as marketing, EU (farming) programmes and new equipment seem more positive. Higher income certainly allows for paying for extra (advisory) services, while computer users possibly have a better appreciation (of the value) of information. The ones who have plans for their farming business may well comprise a distinct group of farmers who need information in topics such as the aforementioned ones (most modernisation plans concern new equipment). Marketing starts to gain in importance among farmers due to the last CAP reform (decoupling of direct support from production). The differentiation of willingness to pay especially between plain and mountainous areas is in line with previous research findings (re: Koutsouris, 1999) indicating that 'dynamic' farmers in mountainous areas suffer the most from the lack of advisory services.

Further, it is worth noting that young rural inhabitants have high educational qualifications as compared to the elders (and the relevant national rural average) which, though, do not appear to make a difference for the topic under consideration. At this point it is also worth commending on the type of information considered as most important for farming. As aforementioned, in general, for most of the young rural inhabitants the most important information needs of farmers are defined within rather traditional, technical boundaries thus largely ignoring rural development and, to a lesser degree, entrepreneurship; this certainly points to the fact that especially farmers are locked-in within a 'traditional' farming logic and lack important concrete information on current policy trends. This can be, in turn, attributed to the malfunctioning of the Greek Extension Service in terms of both homogeneous and 'modernisation' orientation and its bureaucratisation and thus ineffectiveness in fulfilling its advisory and training tasks (Koutsouris, 1999; Kazakopoulos et al., 2005).

The aforementioned findings support the hypothesis that - despite the dominant, in rural areas, perception that advisory services should be the state's responsibility, translated as "free of charge and available to all" - the current situation at national level and international trends may allow for putting in place cost-recovery mechanisms. Such a prospect, according to the international experience and debates, should be dealt with extreme care (definition of target-groups, services to be provided and determination of fee) so that it will not make extension socially exclusive. Moreover (re: introduction of a fee for service or not) it is clear that the Greek Extension Service is in urgent need of restructuring preferably following a farming/rural systems approach in order to be able to provide targeted support to the highly heterogeneous Greek rural communities and the diverse needs of their inhabitants - farmers or not (Koutsouris, 1999; Gidarakou et al., 2006).

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