'Failing' to implement FAS under diverse extension contexts: a comparative account of Greece and Cyprus

Alex Koutsouris

Department of Agricultural Economics & Rural Development, Agricultural University of Athens, koutsouris@aua.gr

Abstract: The setting-up of Farming Advisory System(s) is an important element of the 2003 European Union Common Agricultural Policy reform. FAS (i.e. advisory activity) has been introduced through Reg. 1782/2003 primarily, but not exclusively, aiming at helping farmers with cross-compliance, i.e. the maintenance of farms in good agricultural and environmental conditions (GAEC). The current paper aims at critically examining the implementation of FAS in Greece and Cyprus. The two countries have different extension systems which have decisively affected the implementation of FAS. Greece is a characteristic case of the demise of extension while in Cyprus the 'traditional' extension service is, despite shortcoming, still well-functioning. In both cases the setting up and implementation of FAS seems to have failed - at least as far as the numbers of farmers participating in the scheme is concerned. The exploration of the reasons for such a 'failure' is thus undertaken.

Keywords: Extension systems, FAS, Greece Cyprus

Introduction

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; 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 visà-vis the pragmatic need for (sustainable) rural development. Moreover, political reforms have put considerable pressure upon public sector extension services. Therefore, an extensive debate about the role of the public sector in the provision of agricultural extension services emerged (see: Alexopoulos et al., 2009; Cristovao et al., 2012). Consequently, many countries started implementing and experimenting with different cost-sharing and cost-recovery processes (commercialisation, privatisation, vouchers, etc.) implying an increased involvement of the private sector in the delivery of extension services within pluralistic extension systems. In this respect, the state has, on the one hand, 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, etc.) and, on the other hand, 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 delivery (see: Alexopoulos et al., 2009; Cristovao et al., 2012).

In Europe, research, extension and education, and, more specifically, their state-owned or state-funded components have been strongly restructured (Knickel et al., 2009), resulting in a plurality of configurations. Concurrently, new concerns have emerged, such as "the negative environmental impacts of industrial agriculture, the quality of life of rural population and rural employment, and the positive externalities linked to agricultural production and demanded by society", leading to new agendas and shifts in rural development approaches and new demands in terms of knowledge development (EC, 2011). Recent documents, such as the 3rd EU Standing Committee on Agriculture Research (SCAR) Foresight Exercise Report (EC, 2011:181), stress the role of the knowledge and innovation system and specifically underline that "Agricultural extension services are a vital component of a strategy to ensure that science developments and innovative practices are appropriately developed and targeted".

FAS

The setting-up of Farming Advisory System(s) is an important element of the 2003 European Union (EU) Common Agricultural Policy (CAP) reform. A major change introduced in the EU agriculture through this CAP reform, concerns the discontinuance of the link between farming subsidies and (volume of) production. Since the reform's implementation, producer support is largely decoupled from production decisions. On the other hand, farmers, in order to be able to receive support (payments), have to respect environmental, food safety, and animal welfare legislation, as well as the maintenance of the farm in good agricultural and environmental conditions (GAEC). This link between the payments to farmers and the respect of compulsory standard is called cross compliance. The FAS (i.e. advisory activity) has been introduced through Regulation (EC) N° 1782/2003, in order to cover at least GAEC. Setting up FAS, i.e. a comprehensive system offering advice to, at least, commercial farms, was mandatory for the EU Member States (MS) since January 2007 (Regulation, article 13).

The FAS although primarily aiming at helping farmers to be at least compliant with crosscompliance can also serve as a horizontal tool covering broader CAP issues depending on the needs of MS to improve the sustainable management and overall performance of their holdings. According to the Regulation, in order to attain such objectives two measures have been available to the MS: measure 114 supporting the use of advisory services by farmers and forest holders (Regulation, article 24) and measure 115 supporting the setting-up of farm management, farm relief and farm advisory services for farmers and of FoAS for forest holders (Regulation, article 25). The use by farmers and forest holders of management and advisory services, and the settingup of farm management, farm relief and farm advisory services is supported from the European Agricultural Fund for Rural Development (EAFRD) as foreseen under Regulation (EC) N°1698/2005. The participation of farmers is voluntary. Under Regulation (EC) N°1782/2003, the minimum target group for FAS were those farmers receiving at least €15,000 of direct pavments in line with provisions laid down for the different payment systems in Regulation (EC) N°1782/2003; however, this condition was removed through Regulation (EC) N°73/2009. FAS can be operated by one or more designated authorities or by private bodies and therefore is defined as a system rather than specific services. Furthermore, detailed capacities are requested from authorities and bodies selected to provide such advisory services, in order to be selected or accredited (Article 15(2) of the Regulation (EC) N° 1974/2006). These include appropriate resources in terms of staff, technical and administrative capacity. Regulation (EC) N°1782/2003 also requires strict obligations in terms of data protection from advisors and advisory bodies. The FAS has been gradually introduced since 2005 and, as aforementioned, MS were obliged to introduce it from January 2007.

Methodology

The current paper utilises data collected through a survey among all those (individual agronomists and structures) who actively participated in the Greek FAS programme. The survey was based on questionnaire which was sent out by email (October 2011); by December 2011, 51 questionnaires were returned (Tyligadi & Koutsouris, 2013). Further data for both Greece as well as for Cyprus have been collected through the PRO-AKIS project in the summer 2013.

Extension Services and FAS in Greece and Cyprus

Extension in Greece

The Greek Extension Service was formally established within MoA (Ministry of Agriculture) in 1951 aiming at the re-organisation of the agricultural sector which was ruined after World War II and the following Civil War resulting, among others, 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 (selfsufficiency in strategic food crops) owing to the massive and co-ordinated mobilisation of its staff (agronomists/extensionists) on the basis of extension programmes. During this period, considered as the "golden age" of Extension, extensionists performed an educational role explicitly aiming at changing farmers' attitudes towards modernisation. The main characteristic of their work was a missionary attitude and popular image. Although after the mid 60's, the Service, fulfilling the increasing administrative needs of the State (implementation of policies and subsidies), became engaged in bureaucratic tasks, the major turn in its functions appeared after the access of Greece in the EC (1981). Since then, the administrative burden of the Common Agricultural Policy (CAP) implementation (and relevant controls) was designated to the Extension Service. Thus, extensionists became more than ever involved in bureaucratic - administrative role and thus severely restricted vis-à-vis the provision of advice to Greek farmers. Therefore, information provision and training faded out and experimental and demonstration fields were abandoned on behalf of the maximisation and distribution of subsidies to farmers (Koutsouris, 1999; Alexopoulos et al., 2009).

Moreover, during the last 25 years, in the name of the downsizing of the state, decentralization and lately the economic crisis, the previously existing structures under one authority/MoA (from the national to the sub-regional to the local level), have become (semi)autonomous and/or transferred under new administrative structures/authorities. According to the Presidential decree for MoA (1990), till today MRDF (MoA was retitled to Ministry of Rural Development and Food in 2004) comprises seven General Directories one of which is the GD of Agricultural Extension & Research. This, in turn, comprises five Directories, one of which is the Dir. of Agr. Extension. In the past, each of the Prefectural Directorates of Agriculture was a branch (and integral part) of the Ministry of Agriculture (MoA); each Prefectural Dir. included an Extension Section, further branched with Extension Offices in major towns and villages in each Prefecture. The Dir. was also responsible for the local Training Centres (KEGE). Two-way communication between MoA headquarters in Athens and the decentralized services in the countryside was regular through extension programming and evaluation and information exchange. With the first wave of decentralization, in 1997, the Prefectural Directorates of Agriculture were cut away from MoA and transferred under the jurisdiction of the Prefectural authorities. The agronomists were thus transferred from MoA to the Ministry of Interior and the Dir. was controlled by the Prefectural governor which made the Dir. vulnerable to local pressures and politics. The second wave of decentralisation, in 2010, resulted in the following structure: a) the headquarters of the MRDF, b) the regional and sub-regional services and c) the Municipal Offices of Agricultural Production (municipality/local level), with no actual coordination among them. In parallel, various Dirs were amalgamated into a single Dir. of Agricultural Economy & Veterinary at sub-regional (ex-Prefectural) level. Meanwhile, a number of new (semi-autonomous) organisations have also been established: NAGREF (1989), ELOGAK (1993), OGEEKA (1997), OPEKEPE (1997), AGROCERT (1998), etc. ⁵ However, since 2011 a new organisation ELGO DIMITRA (incorporating the ex-semi-autonomous organisations NAGREF, OGEEKA, AGROCERT and ELOGAK) was established. Nevertheless, it is only in 2013 that the organization actually started to consolidate its new administrative structure with no indication of the ways that the activities of the ex-organisations (i.e. research, training/information, quality issues and standards, etc.) will be coordinated. Two additional points should also be made. First, the ambition to initiate NAGREF's own extension service was never realized. Second, in 2005, in an effort to counterbalance the lack of extension services in the countryside the MRDF established the TOKAA (Local Centres for Rural Development). These centres were actually in operation in 2008, staffed with highly qualified agronomists. However, they never got off the ground and in 2010 they were closed down and their staff was transferred mainly to OPEKEPE and the headquarters of MRDF.

Overall, in the last 30 years the need for extension has been seriously downplayed as a result of the dominant attitude according to which the absorption of available EU funds (subsidies and grants) overwhelmed 'the need to produce'; in this sense, the scientific support of farmers (being thought of as 'entrepreneurs') was not deemed 'necessary'. Nowadays, the overall restructuring of MRDF is debated (as Greece has to cut down its public services' structures by 30% in the framework of its obligations to the Troika). Various drafts of the new structure have been presented thus far and the result is not clear yet. It has to be noted though that the existence of the Directory of Extension is at stake.

Extension in Cyprus

In Cyprus the Ministry of Agriculture, Natural Resources and Environment consists of three divisions, namely the Agriculture Division, the Natural Resources Division and the Environment Division. The Department of Agriculture as well as ARI (the Agricultural Research Institute) are among the six Depts. of the Agricultural Division of the Ministry. The Dept. of Agriculture comprises 14 Sections, one of which is the Agricultural Extension Section. It is worth mentioning that the Extension Section of the Dept. of Agriculture has changed little since its establishment in the 1960s. Extension work is coordinated by the Extension Section in association with the six District Agricultural Offices of the Dept. Furthermore, the six District offices are subdivided further into 30 smaller "agricultural beats". Each beat is served by an extension agricultural officer, who is assisted by agricultural or animal husbandry technicians. Officers operate on the basis of 'traditional agricultural extension' in the sense that they are in, more or less, close two-way contact with farmers. The Extension Section coordinates all extension activities in Cyprus. That is, it informs the Ministry of Agriculture, Natural Resources and Environment as well as the Agricultural Research Institute (ARI) on problems farmers encounter, trains farmers on innovations regarding agriculture and home economics (including the four District Training Centres - KEGE), and plans, implements and evaluates extension programs as well as a wide variety of agricultural projects. The Section prepares a strategic plan, known as "Annual Extension Programme", including objectives to be pursued and targets to be accomplished based on the identification of local needs and the solutions identified. The progress achieved is checked and evaluated at local and district levels, as well as at the Section's headquarters through personnel follow-up, regular district meetings and detailed reports (Charalambous-Snow, 2010; Morphakis, 1999; Neocleous, 1995).

-

⁵ NAGREF: National Agricultural Research Foundation; ELOGAK: Greek Organisation for Milk and Meat; OGEEKA: Organisation of Agricultural Vocational Education, Training and Employment; OPEKEPE: the Greek Payment Authority of Common Agricultural Policy (C.A.P.) Aid Schemes; AGROCERT: Agricultural Products Certification and Supervision Organization (responsible for the implementation of national policy on quality in agriculture).

FAS in Greece

In Greece the Ministerial decrees concerning FAS were launched in 2006 and the System was officially established in 2007 - as required by the EU Regulation. The Greek MRDF⁶ chose to implement only Measure 114. The approach adopted was on-farm one-to-one advice; there has not been much prioritising of groups of farmers, except the initial obligation to give priority to farmers receiving more than \in 15,000 in direct payments; farmers partially contributed to the costs of that advice (20%), i.e. farmers were supported/subsidized up to 80% for the services up to a maximum amount of \in 1500.

In the first place, in 2006, agronomists were called to submit applications to become certified as advisors within the FAS; 638 independent agronomists as well as 30 so-called advisory structures (such as agricultural co-operatives or agronomists' companies) with 92 agronomists were registered. The minimum requirements were that agronomists should have a university degree and at least two years of professional experience as well as that they do not work either for a public agency (including higher education institutions) or as dealers of agro-inputs. Furthermore FAS advisors were obliged to follow specific training related to the objectives of FAS and relevant policies (i.e. at least, SMR & GAEC) in December 2008. Out of those registered finally 39 independent agronomists and 16 structures (with 58 agronomists of which 4 agricultural co-operatives with 8 agronomists), i.e. 97 agronomists, actively participated in the programme. As far as farmers were concerned, 4,370 applications were received (November 2008 – February 2009) by the relevant authorities, out of which 3,859 were approved. By the end of 2010, 2,160 farmers produced the documentation in order to receive the relevant subsidy. Finally 2,114 were approved; that is, 55.23% of those who had put forward an application were finally found eligible and were subsidised for the advice received. This is a disappointing result given that the ex-ante target had been 25,000 farmers and 5,000 forest owners.

In most aspects Greece followed, in general, the practice followed by the majority of the EU MS. Given the serious problems of public Extension service, FAS through mixed private bodies was expected to somehow become a system which might compensate for such a situation. Nevertheless, the results of the programme are rather moderate. This owes to a number of factors including: advisors' inadequate training on FAS and thus line of action, the lack of an effective campaign to create awareness about the programme which along with farmers' mentality (indifference and suspiciousness towards a programme which did not bring about any financial gains – obsession with subsidies) resulted in major difficulties concerning farmers' participation into FAS, and the short time of the programme's implementation. As a result, according to the FAS advisors, the gains on the part of the farmers in terms of knowledge and skills are at most moderate; innovations were largely not disseminated through the programme (Tyligadi & Koutsouris, 2013).

FAS in Cyprus

In Cyprus FAS was only marginally implemented. This owes to the fact that the Ministry of Agriculture, Natural Resources and Environment had already set up the Cross-compliance Service (coordinated by the Dept. of Agriculture in which all relevant Depts of the Ministry sit in) and through the Extension Section (in cooperation with the other Depts) had already made the necessary information campaign, at least as far as cross-compliance is concerned⁷. Therefore, the Implementation of Measure 114 was taken rather as an opportunity to set up a mixed system vis-àvis the EU Regulation (not as an absolutely necessary for the improvement of the Cypriot agriculture action).

⁶ The responsible for FAS GD was not that of Agricultural Extension & Research but the GD of Plant Production.

⁷ See: http://www.moa.gov.cy/moa/crosscompliance/crosscompl.nsf/dmlindex_gr/dmlindex_gr?OpenDocument

All the necessary actions for the establishment of the system were thus undertaken. The Dept. of Agriculture/Extension Section chose to implement only Measure 114 through private bodies of mixed status (profit/non-profit) with mixed cost for farmers (i.e. support to the farmers is limited to 80% of the eligible cost per advisory service, up to a maximum amount of €1500). The number of (on-farm) visits per year per farmer were defined to five for obligatory actions (crosscompliance and safety) and to eight for optional/supplementary actions (i.e. bookkeeping, organic farming, integrated production, management of livestock, greenhouse or forestry farms). Open calls for consultants and farmers were publicized. As far as consultancy companies are concerned, a number of prerequisites apply: they should cover the whole country, have appropriate staffing (at least, a permanent, experienced agronomist and official contracts with at least one economist, one veterinarian and one forester) and infrastructure as well as not be public entities or involved in the marketing of inputs (shops). Furthermore in order to be certified FAS advisors were obliged to follow specific training related to the objectives of FAS and relevant policies. The training was organised by the Extension Section and took place twice (2009 and 2010). Its duration was two days; afterwards, trainees sat in an examination; if successful the trainees were certified in FAS The objective was to prepare a pool of certified scientists who might be employed by one of the companies who might apply as consultants within FAS. Overall, 120 people were trained out of whom 72 were certified. In parallel, in 2007 and 2010, 139 staff members of the Ministry were trained as well. Farmers put together their applications in March-July 2011. Overall, 128 applications were received out of which 84 were eligible. This is a disappointing result given that the ex-ante target was 1.300 farmers. On the other hand, out of the 4 consultancy companies (vs. 6 foreseen) registered, only two were active (with 41 and 43 FAS contracts with farmers, respectively).

In most aspects Cyprus followed, in general, the practice followed by the majority of the EU MS. Main problems identified during the implementation of FAS in Cyprus, on the part of consultants, relate to the lack of cooperation between the consultancy companies, bureaucracy - which obliged consultants to spend most of their time in filling the necessary forms on behalf of the farmers (otherwise farmers would opt out), the small size of Cypriot farms and the small amount of eligible costs allowed. The task to attract farmers was a tedious one – consultants had to spend their afternoons in the local cafes in order to attract clients. The need to change the funding procedure (80% of the eligible costs paid to the farmer who then had to pay the full cost to the consultant) was also underlined. Furthermore, one of the consultants suggested that consultants' certification has to become stricter. Thus far, no relevant research or evaluation has been carried out.

Discussion and Conclusions

Greece

Since the accession of Greece into the EEC/EU in 1981 the Greek Extension Service gradually got heavily involved in fulfilling the increasing administrative bureaucratic tasks of the State (implementation of the CAP policies and control of subsidies); extensionists were thus gradually transformed into almost typical civil servants working in office. Therefore, extensionists became more than ever severely restricted vis-à-vis the provision of advice to Greek farmers (bureaucratic function; conflict between advisory and inspection roles); information was provided to those of the farmers who actively sought it albeit in a rather fragmented, inadequate and inefficient manner. As a result, as Alexopoulos et al. (2009) and Charatsari et al. (2011) clearly indicate, there is demand for extension and training, even if this implies fees, given that a number of prerequisites pertaining the content, format and personnel are fulfilled, that is if the current shortcomings (Rigou & Koutsouris, 2011) will be alleviated. The vacuum created was filled by private agronomists either working for private companies or establishing local commercial enterprises promot-

ing, in both cases, all kinds of commercial inputs who nevertheless have not gained farmers' trust (Kaberis & Koutsouris, 2012).

The current picture of advisory/extension services in Greece is that of a highly fragmented and ineffective system. More specifically, the breakup of the services and therefore of the line of command of the Ministry of Rural Development & Food (MRDF; ex-Ministry of Agriculture) in the name of decentralisation as well as due to the financial crisis resulted in the following paradox: the headquarters of MRDF seem to be isolated from lower levels with the regional and subregional (ex-Prefectural Directorates of Agriculture) services being under the Ministry of Interior which again seem disconnected from the local offices (ex-Extension Offices) being under the Municipalities, although the tasks of all the sub-national levels emanate from MRDF. The breaking away of a number of functions from MRDF (such as research and training) has resulted, at best, in extremely weak linkages and thus coordination and cooperation among these organisations. Furthermore, their functions are in the last 3-4 years severely curtailed given the current crisis implying lack of staff and funds. Moreover, MRDF is perceived as being primarily occupied with the maximization of the CAP financial resources and their distribution to farmers resulting, in turn, in farmers' obsession with subsidies and grants. Despite continuous calls (on the part of academics and GEOTEE⁸) for the reorganisation and reorientation of extension services in Greece no relevant action has been taken; on the contrary, the extension system has been disrupted. Currently, the restructuring of MRDF and the establishment of ELGO do not seem to lead to the improvement of the situation. Within such a framework, the poor results of the FAS implementation in Greece, owing to factors such as inadequate overall programme's planning and lack of advisors' training along with farmers' indifference and lack of an information campaign addressing them, point to the failure of extension (public and private) in the country.

Cyprus

In Cyprus, the Extension Service covers, as a coordination mechanism, more or less, actors' bonding needs. The service is, for example, in continuous contact with producer groups/coops (through District Offices) as well as with individual farmers through District Offices and beats extension officers; furthermore, the Extension Section cooperates with ARI in putting together its annual extension programmes (which the Section monitors) as well as in defining research needs. Therefore, a two-way communication mechanism between the Extension Section and farmers is, despite shortcomings, long ago established and still working. Within such a context, as far as FAS is concerned, the set-up of the Cross-compliance Service on the part of the Cypriot Extension Service downgraded its implementation to a marginal action – rather as an experiment vis-àvis the establishment of a mixed system in the country. Furthermore, on the part of the Dept. of Agriculture, acknowledging more or less the aforementioned problems, the need for FAS to become more flexible, to cater for the specificities of smaller Member-States, as well as the high administration costs to serve small farms are underlined. Currently though, the increasing involvement of the Extension Service with bureaucratic tasks (a result of the country's accession into the EU in 2004) and the general pressure for the restructuring (downsizing) of the public sector by the Troika, may result in the downgrading of extension/advisory work in Cyprus. However, privatisation does not seem to be a viable option for Cyprus due to the extremely small scale farming (and other structural characteristics of the sector) in the country.

⁸ Geotechnical Chambers of Greece

Conclusions

The Farm Advisory System has been one of the major initiatives of the EU-Commission within the fourth Rural Development Programmes (2007-2013). Its results, in the first place, clearly show the diversity of approaches used in the different EU-MS. The relevant evaluations (ADE 2009; EC 2010) demonstrate that the results, even though difficult to quantify, are positive: the FAS helped increase farmers' awareness on the topics addressed; one-to-one advice was considered particularly effective; the establishment of the FAS represented a good opportunity to rethink and improve the wider advice and knowledge information systems in the agricultural sector; the FAS helped farmers to meet cross-compliance requirements; it also increased farmers' financial management skills (accountancy) and improved their bookkeeping as regards cross-compliance obligations. On the other hand, the effectiveness of the FAS was found to be still limited; a rather low use of FAS' tools and the need to improve its management, ensuring that knowledge is shared between actors and that synergies between various instruments (advice, training, information, extension and research) are underlined.

The examples of Greece and Cyprus, while in line with the latter (negative) points of the aforementioned evaluations (with Greece not following the positive aspects of evaluations either), further show that FAS is heavily dependent on contextual factors, notably policy environment and capacities of potential service providers and partners which influence extension services' characteristics (Birner et al., 2009). However, the two cases which, according to the hard data (i.e. the numbers of farmers-beneficiaries) appear as failures, have quite different impacts. In Greece the demise of state extension was not compensated by the establishment of FAS; therefore the failure has overall negative consequences. On the contrary, in Cyprus the poor performance of FAS, given the existence of a well-functioning extension service, does not seem to have serious repercussions.

It follows that the configurations of the FAS are and will be shaped and re-shaped through the continued interplay of different forces, inside and outside the system. The goals, the approaches, the functions and roles of advisors and other stakeholders, and the types of organizations will certainly differ from country to country and place to place. The FAS, given the speed of changes and the multiple and diverse agricultural and rural development processes, will certainly be multifaceted and dynamic. Currently, in line with the evaluations suggesting that the voluntary concept and overall flexible architecture of the FAS should be maintained, the EU-Commission as well as various actors concerned with extension/advisory services are engaged in promoting FAS within the new CAP policies (2014-2020). Major topics debated concern: a) advisory content and methods; b) the organisation of advisory services; and c) the financing of advisory activities. Furthermore, an innovation-partnership measure dedicated to the development and dissemination of innovations in farming systems and rural territories, in order to address future challenges for agriculture and rural development are also promoted. Such measures should be given serious consideration especially in the Greek case where, given the demise of state extension, their effectiveness should be secured.

References

ADE – ADAS – AGROTEC - Evaluators.EU (2009) Evaluation of the implementation of the Farm Advisory System. Louvain-la-Neuve, Belgium, ADE.

Alexopoulos, G., Koutsouris, A. & Tzouramani, I. (2009) The financing of extension services: A survey among rural youth in Greece. The Journal of Agricultural Education & Extension, 15(2): 175-188.

Birner, R., Davis, K., Pender, J., Nkonya, E., Anandajayasekeram, P., Ekboir, J., Mbabu, A., Spielman, D. J., Horna, D., Benin, S., & Cohen, M. (2009). From best practice to best fit: A framework for designing and analyzing pluralistic agricultural advisory services worldwide. The Journal of Agricultural Education & Extension 15(4): 341-355.

Charalambous-Snow. E. (2010) Increasing communication effectiveness and efficiency between the Department of Agriculture and the Cypriot farmers they serve. PhD Dissertation in Agricultural and Extension Education, The Pennsylvania State University.

Charatsari, C., Papadaki-Klavdianou, A. & Michailidis, A. (2011) Farmers as consumers of agricultural education services. The Journal of Agricultural Education & Extension 17(3): 253-266.

Cristovao, A., Koutsouris, A. & Kugler, M. (2012) Extension systems and change facilitation for agricultural and rural development. In The farming systems approaches into the 21st century: The new dynamic. I. Darnhofer, D. Gibbon and B. Dedieu. Dordrecht, Springer: 201-227.

European Commission (2010) Report from the Commission to the European Parliament and the Council on the application of the Farm Advisory System as defined in Article 12 and 13 of Council Regulation (EC) No 73/2009, COM (2010) 665 final. Brussels, EC.

European Commission. (2011). Sustainable food production and consumption in a resource constrained world. 3rd SCAR Foresight Exercise. Brussels, DG Research & Innovation/DG Food, Agriculture & Fisheries.

Kaberis, N. & Koutsouris, A. (2012) "Reflections on the 'expert syndrome': a Greek case study on extension education. In: Producing and reproducing farming systems: New modes of organisation for sustainable food systems of tomorrow (10th European IFSA Symposium), http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2012/IFSA2012 WS1.1 Kaberis.pdf

Knickel, K., Brunori, G., Rand, S., & Proost, J. (2009). Towards a better conceptual framework for innovation processes in agriculture and rural development: From linear models to systemic approaches. Journal of Agricultural Education & Extension 15: 131–146.

Koutsouris, A. (1999) Organisation of Extension Services in Greece. Options Mediterranneenes, Serie A: Seminaires Mediterraneenes, 38: 47-50.

Morphakis, K. (1999) Organisation of extension services. National case studies: Cyprus. Options Mediterraneenes, Serie A: Seminaires Mediterraneenes, 38: 79-82.

Neocleous G. (1995) Agricultural extension in Cyprus. Cahiers Options Méditerranéennes, 2(2): 5-32.

Rigou, A. and Koutsouris, A. (2011) Agricultural training and entrepreneurship: The case of 'young farmers' in a Greek prefecture. In Private - public partnerships for advisory services in Europe (Proceedings 20th ESEE Seminar). JTO School of Management, Kirkkonummi, Finland: 204-209.

Tyligadi, V. and Koutsouris, A. (2013) Agricultural Extension: The Case of Farm Advisors in Greece in the framework of the Reg. (EC) 1782/2003 (FAS). In Extension education worldwide: trends, challenges and cases (Proceedings of the 21st ESEE). O. Ozcatalbas. Akdeniz University, Antalya: 259-264.