New profiles and new trades

Debbané R. G.

in

Dupuy B. (ed.).
Advanced training for agricultural and food managers in the countries of the Mediterranean area

Montpellier : CIHEAM
Options Méditerranéennes : Série A. Séminaires Méditerranéens; n. 36(2)

1999
pages 81-84

New profiles and new trades

Raphaël G. Debbané
President of an agro-industrial group (Lebanon)

Abstract. In Lebanon, most operators who are trying to innovate in agriculture are blocked by a lack of qualified people able to deal with the introduction of new technics and new crops. Suggestions are given so as Universities adapt their programs in order to fulfil these gaps. They should prepare their students by giving them not only theoretical courses, but also by giving them the opportunity to practice these theories by following training in the field eventually for one full season.

Key Words. Polyvalent

Key Sentences. Field training, familiarisation with new technics experimental centers in universities, more qualifications in agro-industry knowledge in co-operative's management.

Résumé. *Au Liban, les opérateurs qui essayent de moderniser l'agriculture se heurtent à l'absence de personnel compétent pour aider à l'introduction et à l'établissement de nouvelles techniques et de nouvelles cultures. Des suggestions sont données pour que les Universités fassent évoluer leurs programmes dans le but de combler ces lacunes. Elles devraient préparer leurs élèves bien sûr, par des cours de théorie, mais aussi leur donner l'opportunité d'être exposés à des périodes de travaux sur le terrain qui pourraient aller jusqu'à couvrir une saison complète.*

Mots-clés. *Polyvalence*

Phrases-clés. *Formation sur le terrain, familiarisation avec les nouveautés, centres d'expérimentation dans les universités, plus de compétence dans l'agro-industrie, formation au management des coopératives.*

In life, when you meet someone, you try to find out who that person is , his past and current life. Basically you try to learn about his past and experience, you attach more or less importance to what this person is telling you. This also goes between a speaker and his audience.

If Mr. Chioccioli chose to be with us today, a choice for which we are grateful, he did it on account of my experience and my accomplishments in the field of agriculture. Even though is may be embarrassing to talk about oneself, I owe it to you to introduce myself briefly.

A few months ago, I celebrated 42 years of active life in the field of services to farmers in Lebanon and Syria. During the course of my career, I hired and trained over 200 agricultural engineers. I currently run a business employing 200 people, including 65 agricultural engineers who serve more than 3,000 farmers in both countries. The scope of business of my company covers almost all the needs of farmers in terms of: *Seeds (market garden products and potatoes), Plants (strawberries and bananas, Fertilisers (chemical and organic), Plant protection products, Irrigation equipment, glasshouses, Banana production and selling (in Lebanon).*

I have distributed the plant protection products of several international companies for over 25 years : *Dupont, Dow AgroSciences ; Schering, Hoescht and Roussel (forming the new company Agrevo), Uniroyal*. We have several seed and agricultural chemical product trial and testing centres.

In the same way, I took the initiative of introducing new techniques for the first time Lebanon and Syria, such as: Polyethylene roof glasshouses (1972), drop by drop irrigation (1973), glasshouse production of bananas (1994) selling potatoes to the food processing industry (1996).

I have gained a vast and long experience in the field of agriculture, enabling me to speak not as an academician but as a man in the field, who has approached both farmers and academics.

Agricultural production chain

As I come from an emerging country, I have obviously experienced a great deal of frustrations owing, among other things, to the fact of not always finding adequate profiles. In order to explain them to you as clearly as possible, I will review the successive steps of the *Agricultural Production in Chain* in a chronological sequence, and stress details that will help us identify our needs and gaps.

The agricultural production chain as I see it is as follows: *Selection of cultures, Planting, Harvesting and Protection, Selling (more and more referred to as «Marketing»)*.

For each of these steps, I will identify situations and cases where we suffered from the lack of an adequate profile. I will conclude by suggesting the new profiles we need to train in order to meet the needs of new businesses.

1. Selection of Cultures, Planting *(Table 1)*

Any successful culture requires the following steps:

❏ identifying the assets of the country (weather, water availability, lie of the land, etc.),
❏ variety research, in order to select adequate cultures and varieties in an optimised manner,
❏ conducting trials in order to ensure optimised local condition productivity,
❏ selecting adequate equipment for increased performance during the whole production cycle.

Planting consists of putting into practise the above theoretical data:

❏ irrigation techniques,
❏ fertilising based on appropriate technical analysis of the ground and leaves,
❏ parasite control,
❏ definition of the ideal harvest time.

What are the new profiles and new training needs ?

One example will illustrate our needs:

a] Problem - example: glasshouse bananas

We had decided to introduce Lebanon to glasshouse banana production. At that point, choosing the adequate variety of bananas was vital. As we didn't find the qualified person locally, we had to look outside Lebanon to find the required technical skills and expertise for our project. In the same way the expertise and technicity to choose the ideal glasshouse for the culture didn't exist.

Suggestion: Train to new techniques

As a result of this example, it would have been advisable for Agricultural Universities in Lebanon to train agricultural engineers to new techniques, even and specially if these don't exist in Lebanon.

Protected growing of bananas is an example, which can be applied to all potential cultures in Lebanon and to the production techniques and means of these cultures.

b] Problem - example: hydroponics roses

Another example is hydroponically grown roses. Here also we experienced the lack of qualified agricultural engineers. In this case, not only did we feel Universities in Lebanon ought to have trained their stu-

dents to this technique, but ideally students ought to have had the opportunity to put into practise and live for one full season all the steps of this production technique.

Suggestion: Establishing University Trial Centres

Universities must set-up Trial Centres enabling students to witness the daily steps of the agricultural production chain. This would raise their awareness and encourage them into following the details of the whole process and into starting research in order to create new techniques to bring the agricultural sequence towards a maximised evolution of its capacity.

Medical schools have their students take internships in Hospitals in order to make them aware of medical practise. Agricultural Universities ought to do the same. After all, plants are a living substance, and those who are about to handle them should be prepared to do so by following extensive «practical» work.

We also need to mention that in some countries, Universities go beyond this, by heading themselves the identification of new culture varieties in their own Research Centres.

Thus, Universities ought to very seriously work on including in their programs and train their students to:

- ❏ learning culture techniques
- ❏ practical research (developing new varieties)

Table 1. Agricultural production sequence: selection of cultures and planting

Basic steps	Problems - Examples	New profiles and new jobs
Compared assets of the country (weather and other)	***Bananas***	***Training needs***
Selection of cultures and varieties	Variety selection	Polyvalent agricultural engineers
Local trials	Glasshouse selection	Increase field training
Equipment selection		New technique and
Irrigation techniques		new culture awareness
Fertilising	***Roses***	***In Universities***
Parasite control	In ground / above ground	Establishing trial centres
Technical analysis	Lack of field experience	Initiating new variety research

2. Cropping, Protecting and Selling Products *(Table 2)*

Speaking of harvesting brings us to the various techniques to be used to harvest, grade, protect and possibly mature, in the interval before the ideal time to sell the production.

This final step crowns all the efforts made during previous steps. Of course, selling the crop can be done locally in the production country, or abroad. In both cases, it is crucial to target the client base, and to decide on adequate packaging. Once these two steps have been completed, all that remains is to study the best distribution channels and to determine the price policy.

What are the new profiles and new training needs

a] Problem - example: the banana

Here also introducing glasshouse banana culture will help us illustrate, as an example some of the gaps of the agricultural education system.

In Lebanon, producing the right banana variety is obviously important, but it is equally important to know how to harvest, package, protect and mature it. We have had to face, for each of these steps, the lack of qualified agricultural engineers.

Suggestion: As a result of this, Universities vitally need to design a program to familiarise their students with all the modern aspects of production selling.

b] Problem - example: the potato

Mac Donald decided recently to open restaurants in Lebanon, and we were greatly disappointed to find that they did not find the adequate set-up locally (qualifications, variety, deep-freezing equipment, etc.) enabling them to get their potato supplies from the Lebanese market. Once again, this is the result of lacking qualifications in the techniques of deep-freezing and farm production in Lebanon. Such lack of local qualified personnel undoubtedly kept investors from carrying out such projects.

Suggestion: Establish departments to prepare agricultural engineers to various food processing techniques.

c] Problem - example:

Farmers rarely make any money with potato culture on account of the highly unorganised selling process. This mainly results from the lack of qualified individuals to manage farmers' groups, co-operatives that may help sell the production.

Suggestion: Train to Farm Co-operative Management

The individualist mind of the Lebanese farmer does not contribute to setting up successful co-operatives. But were there well-prepared graduates to professionally manage Farm Co-operatives, farmers would be helped and pushed into uniting and joining their efforts. Union is the farmer's strength and will make the success of Lebanese farming.

Table 2. Agricultural production sequence: Harvesting - Protection - Marketing

Basic steps	Problems- Examples	New profiles and new trades
Harvest schedule	***Bananas***	***Training needs***
Harvesting tecniques	Packaging	Getting familiarised with
Grading	Protection	all modern aspects of harvesting,
Refrigerated storing	Maturing	packaging and protection.
Maturing	Consumers' taste evolution	
Local or export	Small size to large size	Increasing expertise
Targeted clients	***Potato***	in the food processing industry (deep-freezing)
Packaging	Evolution towards the	
Distribution channels	food processing industry	Training to agricultural
Price policy	The fast food market	co-operative management

❖