CHARACTERS OF VERTICALLY INTEGRATED COOPERATIVES AND THEIR RETAIL ACTIVITIES IN DENMARK

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ABSTRACT

In 2000 based on the amalgamation of MD Foods in Denmark and ARLA in Sweden the ARLA Foods Danish – Swedish cooperative became the biggest common dairy production, manufacturing and marketing co-operative in the European Union, which has very considerable important experience for the Hungarian supply chain management in food industry. From both of them share of Sweden was more by 2% than Denmark's one, namely 29% in 2000, which decreased to the level of 26,4% in 2001. Opposit to this data, share of Denmark in turnover of ARLA Foods cooperative was 24%, which mostly did not change.

The ARLFA Foods cooperative plays important role in Denmark, because this is the first cooperative in Denmark and Sweden. Mostly the most important cooperatives concern food production additionally to dairy products, for example meat, fruit, vegetables, feed, fur, grass seeds and egg

The study analyses modelling system for vertically integrated product channel by through this cooperative, which has dairy producing – manufacturing factories in 13 countries, trading subsidiarities in 20 countries with 16 thousands employees during the first decade of 2000s. This cooperative is working as a large transnational corporation with managing extra large production capacity based on the market strategy.

Total turnover of cheese, butter and conserved dairy products reached 52-53 % by the end of 2000s, which show that, more than half of value of turnover belonging to the ARLA Foods has been covered by considerably value added or highly manufactured products in this decade. Recently by the end of 2010 Denmark exports its food industrial products to 150 countries of the world economy.

The ARLA Foods faced some issues needed for solving, for example: Quality demands, Food safety, Sustainable Food Production. The ARLA Foods in order to implement solutions for these issues, created new Marketing strategy to produce new products and brand, new and environment friendly technology, setting up the Retail Network in the world economy to extent its turnover.

Keywords: Retail trade, Sustainability, Agrobusiness, Food industry, Vertical integration

INTRODUCTION

The strategic aims of the ARLA Foods works based on the cooperative system by its internal setting up and as a transnational corporation from point of view of out side approach with successfull with vertically integrated product channel including retail network.

The ARLA Foods summarised its strategy concerning the extent the production volume and market positions by new advanced variable products based on the environment friendly technology ensuring successful competitiveness against rival companies on the markets. The cooperative sets up its competitivenes by efficient production and adequate production structure using R&D (Research and Development) in order to increase its price incomes and not by increasing prices (in detailed more in ARLA Foods 2005 and 2006). Therefore ARLA Foods became leadering cooperative producing and selling milk and dairy products.

Also Dobson emphasized on importance for change the product mix is in the direction of more value-added products is evident if the aid granted in 2007 is analyzed. Two-thirds of this

aid was allocated to projects pursuing this aim and the remaining third was allocated to projects increasing the efficiency of production (Dobson, W., 2007).

A clear commitment to R&D+i, which is key in the food sector, and is considered to be a priority in the entities of the three countries analyzed. In many cases the cooperatives have their own research centres or they carry out their research through contracts with universities and specialized companies (Juliá-Igual, J. F.- García-Martínez, G. - Meliá-Martí, E, 2011).

MATERIALS AND METHODS

The marketing strategy can not be separated from importance of increasing turnover in field of retail ensuring the direct connection bewteen the farmers-producers and consumers on different markets. The creation for the highly value added products, which can ensure the marketable of products and remaining the market positions for firms or cooperatives on the world market. To remain the competitivess and market positions is needed for creating the vertically integrated product channel, of wich importance can be understood by *SWOT* analysing and model structure.

There are some main contradictions in case of ARLA Foods, for example on the hand using advantages of cooperative structure from inside of cooperative and economic measure for cooperative, as equially with *transnational corporation (TNC) from outside of cooperative*, but on the other hand sometimes some subsidiatiries do not have adequate contucts with mother country/centre of cooperative and there is *no management harmonization* in some cases between managers of mother country/centre and managers of subsidiarities belonging to cooperatives in other countries (see SWOT analyse for ARLA Foods in this study). This conflict and risk conditions can be solved by better management structure within the whole cooperatives with monitoring and controlling systems to avoid difficulties of the management.

The transnational characters of ARLA-Foods cooperative are described in detailed in Federation of Danish Co-operatives (1999, 2000). Also the environment friendly issues are emphasized to avoid the negative influences on the production process and decrease the environmental demages.

RESULTS

VERTICALLY INTEGRATED PRODUCT CHANNEL OF ARLA FOODS COOPERATIVE

Earlier in Sweden almost the whole milk and dairy production, manufacturing and marketing were managed based on co-operative organisation. ARLA co-operative alone produced and sold 2,112 million ton milk and dairy product annually average in the *second half of 1990s*, which shared 62 percent of the national milk quota, as whole national milk and dairy production. The main working region of ARLA was the northern half of Sweden.

The other Sweden smaller co-operatives played role in supply local markets. Also it is necessary for them to follow the new development strategy, which can provide possibility to remain their market positions by realising interests of co-operative members and by equity capital of co-operatives increased by their members. Within the co-operative framework members can remain their identity and independence in the field of production.

The meaning of the new structure in agricultural co-operatives is to harmonise producing primary agricultural and food products, collection of raw materials and to produce one first stage of processing based on the common interests of members, remaining the independent family farming economy. Additionally to this, the aim is either subsequent processing within framework of firms established by co-operatives or in firms partly owned by co-operatives. Aim of co-operatives is to collect milk from members, harmonise the marketing activity and purchase. Additionally to create vertical integration the other aim of co-operative is equity capital of co-operatives by payment of members to advance production, processing and marketing (Danish Crown Group, in web: History). The ARLFA Foods cooperative plays important role in Denmark, because this is the first cooperative in Denmark and Sweden. Mostly the most important cooperatives concern food production additionally to dairy products, for example meat, fruit, vegetables, feed, fur, grass seeds and egg (see the *Table 1*).

The ARLA Foods which worked in 22 countries by about 15 thousand members, of which there were 7921 Danish and 6988 Swedish farmers at the begining of 2000s. From both of them share of Sweden was more by 2% than Denmark's one, namely 29% in 2000, which decreased to the level of 26.4% in 2001. Opposit to this data, share of Denmark in turnover of ARLA Foods cooperative was 24%, which mostly did not change. Naturally the total turnover of cooperative increased nearly two times more untill the end of 2001. Mostly for the last decade based on increase of turnover the production structure of cooperative has not essently changed in percentage. Share of fresh products was about 40.5%, and share of cheese-varieties increased from 26.6% to 27.9%. The share of butter was about 11% in fact, and the share of conserved milk and dairy products in total turnover was about minimumly higher than 14.5%.

Total turnover of cheese, butter and conserved dairy products reached 52-53% by the end of 2000s, which show that, more than half of value of turnover belonging to the ARLA Foods has been covered by considerably value added or highly manufactured products in this decade. This considerably increases the competitiveness level of the cooperative either on single market of the EU or the world market. The other parts of turnover of ARLA Foods cooperative was covered by the other EU member states, which reached the level of 30.4% of the total turnover, which has increased to the level of 32.5% for a year. The rest of Europe has not so considerably share from total turnover of ARLA Foods cooperative, which was namely 2% in general (International Co-operative Alliance = ICA, 1995 and 2007; Arla Foods, 2005 and 2006).

The largest meat manufacturing factory of the EU is Danish one, the second pig slaughtering and exporter of EU and the third one of the world is also Danish one. Output of the agricultural and food industry reached the most level in the world economy, because in 2008 this industry achieved level of 8.7% of development comparely with its result of 2007 in Denmark almost in field of export of animal originally manufactured products. Recently by the end of 2010 Denmark exports its food industrial products to 150 countries of the world economy. Naturally the global economic crisis of 2008 had considerable influences on the volume of production, decreased the income conditions of agri-food industry, but the Danish food industry could successfully compensated by increasing level of efficiency (LANDBRUG, 2000-2008).

New strategic principles and conceptions need to be realised by *changing product strucutre* and necessary for increasing role of innovation. Leading managers of ARLA Foods decided to continue the production of possible best products varieties, in order to increase role of the

cooperative to extent its position in field of retail large scale supermarket chains. In order to realise this aim in mas product production they want to use the most advanced tehenology and results of the industrial revolution. Yearly 150 new products were created and sold on the world market with ARLA Foods' new products. By the creating new innovation centres in Denmark (cheese, butter and powder formed products) and in Sweden (liquide milk, extra manufactured feed products) the cooperative implemented considerable investments in field of production of highly manufactured products. First in consequence of the international competitiveness of highly value added products there was a possibility that ARLA Foods cooperative could create long term co-operations with NASA organization researching space and adapting the highest top technology in the United States by using several important food products made by the cooperative.

Table 1. Biggest Agricultural Cooperatives in Denmark, in 2009 (by turnover, in billion Euro)

			Luio)			
	Name	Sector	Turnover	Market	Farmer-	Salaried
			(Billon	Share	members	Workers /
			Euro)	(%)	(1000)	Employees
						(1000)
1	Arla Foods ⁽²⁰⁰⁹⁾	Dairy	6,200	93	7,625	16,200
2	Danish Crown ⁽²⁰⁰⁹⁾	Meat	6,000	84	10,700	23,500
3	DLG	Feed compounds	4,600	41	28,000	5,000
4	DLA-Agro	Feed compounds	2,450	35	20,000	2,300
5	Kopenhagen Fur	Fur	0,670	99	1,892	0,340
6	TICAN	Pork meat	0,500		0,400	1,800
7	DLF Trifolium	Grass Seeds	0,280		5.400	0,682
8	DANAEG	Eggs	0,130		<100	0,303
9	Daka bio-industries	Fertilizer & Energy	0,120		0,016	0,306
10	Gasa Nordgront	Sales of vegetables	0,090		0,070	
11	KMC	Potato starch	$^{(2008)}$ 0,090		1,500	(2008)0,246

Source: Agriculture in the EU: Statiscal and economic information 2008. European Commission, 2009. Danish Agricultural and Food Council / Landburg & Fodevarer, 2009.

CONCLUSIONS

The ARLA Foods Swedish-Danish cooperative became success because at first they can efficiently use advantages of cooperative system, namely to create strong direct connection between farmers, as *members* of cooperative, in the same time as owners and *consumers* based on *vertically integrated product channel* under cooperative controlling and managment at domestic-national level and international level in the EU and out of EU. ARLA-Foods could get ownership and direct economic interest in *retail phase* of product channel, which ensure the best form of direct contact between farmes and consumers with setting up international wide side network for selling and distributing owned food products. The ARLA Foods faced some issues needed for solving, for example: Quality demands, Food safety, Sustainable Food Production. The ARLA Foods in order to implement solutions for these issues, created new Marketing strategy to produce new products and brand, new and

environment friendly technology, setting up the Retail Network in the world economy to extent its turnover.

Production and marketing management, deep knowledges in highly developed advanced technology and technique, human resource management, experiences of management in cooperative, and additionally to these elements, keeping the internationally controlled qualified demands with highly value added products results in remaining the competitivenes, which all of them have important role in creating product structure meeting market demands.

3. First, in consequence of the international competitiveness of highly value added products there was an imporant possibility for ARLA Food cooperative to create long time cooperation with NASA organization working in the top advanced technology in space research in US for using several important foods produced by the cooperative.

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Table 2. SWOT analyse for ARLA Foods

Strengthen

- Advantages of cooperative structure from inside of cooperative
- Economic measure for cooperative, as equially with transnational corporation (TNC) from outside of cooperative
- Vertically integrated product channel
- Successful Production and Marketing Management
- Production Structure Meeting qualified demands of consumers on domestic and world markets
- Strong role in retail for direct contacts bewteen members (owners) of cooperative and final consumers
- Following demands of Food Safety
- Following demands of Package
- International competitiveness of highly value added products
- Internationally well known brand "ARLA"
- Many new products annually
- Good connection with GRAS (= American Food and Plant Office) and NASA in US

Weakness

- In some cases lack of capital is a difficulty to extent developing and setting up network of its owned retail in some other countries
- Annauncement of cooperative is not enough strong in some countries
- Some subsidiatiries do not have adequate connects with mother country/centre of cooperative
- There is no management harmonization in some cases between managers of mother country/centre and managers of subsidiarities belonging to coopratives in other countries
- Also not in any case the plan implementation can be consequent from side of managers of subsidiarities in other countries
- Not everytime the managers of centre can know the local national traditions which often consumption structure depends on in other countries

Optimal

- Fast retail turnover because of highly level market demands
- Considerable market demands for dairy products therefor increasing price for food products
- Unified law harmonization for qualified demands for production technology of dairy product
- Generally free flow of human resources, capital, products and services on the world market

Threaten

- Because of the globalization created, negative economic influences of the world economy can soon make difficulties for trading and retail on the world market
- Growth of inflation in the world
- Bank crisis from 2008
- Price energy increase in the world economy
- Political crisis in some economies of the world
- Some countries make difficulties for trade and retail for products of importer, f. e. duty system
- US Dollar Currency rate fluctuates sharply and manipulated

Source: Owned analyse