

Executive Summary of Workpackage 6

JEL: L 15, L 66

Keywords: food chain, relationships, communication

1. Introduction

This report represents deliverable (D7) of the EU-funded research project on ‘Key factors influencing economic relationships and communication in European agri-food chains’ (FOODCOMM). It presents the results from work package 6 (WP6) entitled ‘Evaluation of results and derivation of policy and business implications/recommendations’.

The objective of WP6 has been to evaluate the findings from the cross-country survey analysed in WP4 and the country-specific research conducted in WP5, as well as to identify means of improving food chain performance with particular focus on communication and sustainable economic relationships. In addition, it has derived recommendations for possible policy development and actions to be taken in order to enhance well-functioning relationships and communication within selected EU food chains.

The methodology used in WP6 consisted of: first, to summarise the project findings in SWOT (strength, weaknesses, opportunities, threats) tables. In most of the cases this was done separately for each supply chain, except in the case of Poland, where due to the similarities between their two supply chains, only one SWOT analysis for both chains was presented. The aforementioned tables display strengths and weaknesses of economic relationships in the considered chains as well as threats and opportunities for their further development. Second, performance effects of communication and economic relationships are illustrated. Finally, for each of the countries key factors for the development of sustainable economic relationships are presented and recommendations derived for businesses as well as policy.

The structure of this executive summary is as follows: sections 2 to 7 present the country specific findings. Sections 8 and 9 are cross-country summaries of the key factors of success for supply chain development and policy recommendations for improving economic relationships, communication and the competitiveness of European food chains. EU policy implications are considered in Section 10.

2. Finland

The Finnish analysis was based on two supply chains: the pig meat-to-sausage chain and the cereal-to-rye bread chain. The summary below presents the findings for both chains.

The factors which represent strengths in supply chain relationships, such as the high value placed on domestic products by consumers, and high levels of trust creating stability and sustainability, are rather similar in the Finnish pig meat and rye chains. Also, formal written contracts are commonly used especially in the pig meat chain, where strong integration further enhances commitment between the chain members. In both chains communication is generally seen as open and honest; the chain partners trust in the information they get and there are no information blocks or distortions. Information and communication technology (ICT) has increased the efficiency and effectiveness of the food chains by making operational communication between the business partners easier and more flexible. Strategic information is communicated mainly through face-to-face interaction.

However, the unequal bargaining power and information sharing between chain members, market instability and low profitability, are all significant factors which weaken the business relationships and serve to increase dissatisfaction in both chains.

In contrast, the further adoption of ICT and new innovations provides opportunities in both chains. Also, the better usage and sharing of existing information, particularly concerning consumer needs and expectations, could enhance the efficiency of the chains. One of the most evident threats to business relationships in the two Finnish food chains is related to the national agricultural policy and CAP, since they greatly affect the stability of the domestic market. Furthermore, the existence of divergent business strategies, which are related to unequal power distribution within the chains, can also be a major threat.

Sustainability of a relationship and the quality of communication with the main business partner clearly has a strong positive effect on the perceived performance of businesses in both considered chains. This holds with respect to all performance indicators.

3. Germany

Three supply chains were analysed in Germany: the swine-to-sausage chain, barley-to-beer chain and the wheat-to-bread chain. The findings by chain are:

Given the strong competition in the swine-to-sausage chain, awareness regarding cost reduction may strengthen the relationship. Successful businesses acknowledge the importance of reducing costs along the chain. In this respect co-operation and communication along the chain is regarded as a means to increase efficiency and effectiveness in acquiring inputs, in production and in marketing. In addition, quality and food safety are of significant importance for the businesses in this chain, as the market is demanding above average quality and consumers have become more concerned about food safety due to food scandals. Here, a closer collaboration regarding improvement of food safety is needed. However, the costs for more efficient communication means regarding quality and meeting the standards for quality assurance certification systems are challenging weaker chain stakeholders who do not have the capabilities to realise the means and meet the standards. Finally, long-term oriented business relationships provide a basis for the exchange partners to mutually develop conflict resolution capacities and counter distrust caused by food scandals and lack of quality.

Price competition led to cost accounting being a dominant factor in business policy in the barley-to-beer chain, having also a pronounced effect on economic relationships. Exploiting economies of scale to lower production, packaging and logistic costs and to increase market shares or turnover, has been one key driver for intensified collaboration arrangements. In addition, the uncertainty of the beer market has weakened chain relationships due to global sourcing of large breweries and raw materials becoming scarce and more expensive. Key driver of vertical integration in the beer chain is the concern of brewers for their independence. This, at first sight contradicting, statement becomes clearer, when considering the distribution of market power within the chain. Retailers and discounters have attained a very powerful position in the chain. Breweries crucially depend on the decision of the distribution sector what beer brand they will list in their shops. In order to secure sales financially strong breweries are forward integrating into the distribution sector to control and thus secure their own outlet channel. Similar, wholesalers aim to gain independence from food retailers and discounters by establishing beverage warehouses. Economic relationships in the barley-to-beer chain benefit from personal bonds. Personal bonds strengthen economic

relationships as they allow solving problems in a non-bureaucratic manner and thus help reducing transaction costs significantly. However, the development of personal bonds seems to depend on the business size and is of less relevance for large businesses.

One of the most significant factors influencing the strength of relationships between actors in a supply chain is above average consumer demand for quality and variety. Consumer demand for bread is changing steadily and suppliers have to react to the changes in both demanded quality and quantity. As fresh bread is a perishable product, it is necessary to react fast to the quantitative changes in demand to hinder losses through expiration. The actors along the supply chain therefore need to get information on changes in demand from their downstream business partners immediately. The need for rapid information flow can be fulfilled more easily in long-term relationships than in spot market. There is fierce competition among bakeries in Germany. The craft bakeries compete in bakery production with plant bakeries and in distribution with food retailers. Increased competition is a factor strengthening relationships between bakeries and their suppliers. The shortage of wheat in the world market in 2007 induced a significant price increase and thus raised the farmers' bargaining power. While the increased farmers' market power might be an opportunity to develop new relationships on the principle of equal power distribution, it also can be considered as a threat for developing sustainable relationships by causing market instability and intensifying the competitive pressure in the German flour market. Here, the regional origin can improve the competitiveness of small-scaled mills. Especially the growing consumer concerns about food quality and origin provides an opportunity to improve the competitive position to develop long-term exchange relationships between farmers and small-scaled mills and bakeries. Also, long-term relationships allow the reduction of transaction costs and thus the increase of competitiveness.

For all three reviewed agri-food chains and for nearly all the considered performance indicators, businesses with good relationship and communication presented positive performance effects in contrast with businesses with poor relationships and communication.

4. Ireland

In Ireland, two supply chains were analysed: the cattle-to-beef chain and the pig-to-pig meat chain. The summary of WP6 results for both chains is presented below.

Both the beef and pig meat chains operate in markets that demand above average quality, and where producers and processors face increasing input costs and competitive pressures. The Irish Food Board has successfully put in place a quality assurance programme that has enhanced the communication process within the chains and reinforced the type of repeated market transaction used by both chains. Opportunities exist in both sectors to develop quality-based pricing along with differentiation strategies. Analysis shows there is under-use of the information available and there is potential to use information more strategically.

In general, both chains appear to be meeting the needs of their stakeholders; however, inefficiencies were identified particularly on the impact of relationships and communication on innovation. The current communication process is not fulfilling its potential in enhancing chain performance and this is further exacerbated by the low value some chain members place on using information in the strategic planning process. The disparity of power in the business relationship between chain members highlights a significant weakness in the overall quality of chain relationships.

More than half of beef chain members and 60 per cent of pig chain members reported that their communication with their buyer, combined with their use of repeated market transactions, had a positive effect on their business performance in terms of profitability. However, both chains were less convinced of the impact of communication and relationship type on other performance indicators. Chain members may believe that the other performance indicators are influenced by forces outside of the chain relationship. For producers in both chains turnover is dependent on stock levels and this may be influenced by a number of factors including confidence in the market rather than the chain. In the beef chain, both producers and processors expressed high levels of concern over the uncertainty of the market, while retailers were somewhat less worried. Also, in the pig to pig meat chain producers expressed high concerns over uncertainty in the market, while this holds to a smaller extent for processors in this chain. Retailers were not at all worried regarding the market conditions which may reflect their readiness to use import substitutions. Increases in global cereal prices, an important input to production costs in both the beef and pig meat sectors, may also be seen by producers as being a factor outside of the chain relationship. Chain members do not appear to place much significance on the effect of communication and repeated market transaction on market share.

5. Poland

Two Polish supply chains were analysed: the pig-to-ham and cattle-to-beef chains. The summary of findings in WP6 is presented below.

Both chains are very similar as regards economic relationships and communication between the stakeholders. Furthermore, no significant differences have been revealed regarding the main factors affecting these variables.

It is essential for strengthening the relationships within the Polish meat chains that care about quality standards should prevail along the whole distribution chain from the production of animals for slaughter to final product (ham or beef). Information about the required standards is also of importance for supporting chain relationships, because these standards can be more easily obtained within an integrated chain than in a single firm. Labelling and private quality certification systems, as well as the development of brands, support the necessary adjustment to growing consumer requirements, and assure better information flow and traceability. These factors form opportunities for further developing relationships between chain partners.

The small scale of many chain entities, insufficient information, technological shortcomings resulting in poor efficiency and low labour productivity, can all serve to weaken the relationships within Polish meat chains. These factors lead to unequal power distribution between chain partners and unequal participation in chain performance which threatens the development of closer relationships. It is important to note that given the technological shortcomings of some small businesses, forcing them to comply with the same norms and standards regarding quality as larger advanced businesses can also be a threat for the development of business relationships.

Risk reduction, assurance of sales/supply and stabilisation of income, proved to be the main features which strengthen relationships between chain stakeholders operating in an unstable market. In contrast, dependence on the leading partner, lower flexibility in responding to market signals and asymmetry of power used by the chain leader, especially in periods of crisis, weaken these relationships.

Low levels of trust between chain partners frequently results in them failing to notice complementarities between the aims of particular partners and the whole chain. Common aims are limited mainly to the assurance of high quality, which is expected by the market. This does not result in the tightening of links within a chain in order to use modern innovative technology, especially in the production segment of the supply chain. Despite the long-term orientation declared by many stakeholders, an increase in turnover is appreciated more than a greater share of the market, which indicates that business orientation is focussed more on immediate rather than longer-term goals.

The goodness of a business relationship has a positive impact on the perceived business performance. This holds for both considered chains. In addition, the quality of communication also leads to an increase in firm performance in both chains.

6. Spain

In Spain, two supply chains were studied: wheat-to-bread chain and pig-to-cured ham chain. The following are the most important conclusions from the WP6 analysis.

First, evidence on the connection among communication, economic relationships and chain performance (efficiency and effectiveness) indicates that, for both chains, as the quality of the relationship improves the stakeholders' performance increases. Moreover, the quality of the relationships in the two chains is based on trust, satisfaction and commitment with buyers/sellers. In addition, performance is a broad concept that embraces not only the firms' economic indicators, such as profitability and turnover, but also the firms' ability to increase their market share through product quality, in order to establish customer loyalty or preference from those with higher quality products.

Second, as communication quality and quantity in the chains increases, the quality of the relationships improves. Therefore, the quality of communication also has a positive effect on stakeholders' performance, and it follows that in order to increase their performance, stakeholders in the analysed chains need to implement quality communication systems with their buyers/suppliers and to build higher trust, commitment and satisfaction with them. It should be noted that this also has a reinforcing feedback effect. It is also important to note that these findings were collected from a sample of small and medium sized stakeholders operating in the two analysed chains, and further analysis is required in order to generalise the results and recommendations.

Third, as regards the relationship between large food distribution enterprises and their suppliers, since the use of formal contracts is the compulsory norm, trust is not an important issue because compliance to the contractual terms is required by law. Equal partnership is highly sought after by large food distribution chains and their suppliers, so agreements should achieve a balance of interests in order for business performance to be improved.

7. The UK

Two UK supply chains were analysed: the cattle-to-beef chain and the barley to beer/ whisky chains. The main results from WP6 are presented below.

Both the beef and barley to beer (and whisky) chains are characterised by marked quality requirements, strong international competition, and in recent years have witnessed strong financial pressures on their participants. Moreover, both have successfully addressed food

safety issues and have implemented rigorous quality assurance schemes. The beef chain is characterised by a lack of trust amongst many farmers on pricing issues, and this is matched by a strong culture of business independence. The market, therefore, is dominated by spot and repeated market transactions with regular suppliers and buyers. Within the malting barley to beer chain, the requirement for predictable supplies in terms of quantity, quality and price, encourages contractual arrangements and repeated transactions with reliable suppliers and buyers. However, both tight margins and market instability can serve to weaken chain relationships. Furthermore, whilst there are good examples of high quality relationships and good chain communication, there is generally plenty of scope for relationship and communication improvement in both chains. The evidence that exists, suggests that good relationships and communication have a positive effect on profitability, but that these effects are slightly more apparent in the barley to beer chain than the beef chain.

8. Key success factors for supply chain development

The key factors for the successful development of sustainable agri-food chain relationships has been analysed for each country of the project. Section 8.2 to 8.6 will summarise the respective results for each of the study countries, the final section of this chapter (8.7) will provide an overview regarding similarities and differences in those factors between the 6 countries in the FOODCOMM project.

8.1 Finland

Joint and complementary objectives and definition of roles. The level of integration in the Finnish pig meat chain is very high. Particularly the relationship between primary producers and large pig meat processors is close and the objectives of the business relationship are commonly shared. The contracts are generally written.

Communication amongst participants for developing trust, commitment and transparency. As there is a wide variety of communication means normally used in the Finnish food chains, the information sharing between partners is rather easy and flexible. The communication is often informal. The high adoption of ICT in communication has particularly increased the frequency of communication and assisted with the development of trust, commitment and chain transparency.

Joint planning and control of chain assets. The MTK (The Central Union of Agricultural Producers and Forest Owners) has the key role of sharing information and providing knowledge and the organisation has some negotiation power especially in political actions. The MTK is also seen as a strong support for producers and thus it increases their negotiation power in the chain. Additionally, joint planning and development, such as breeding and plant improvement, are significant in strengthening relationships among input suppliers, producers and processors.

Effective mechanisms for conflict resolution. Written contracts and frequent communication are highly appreciated in conflict avoidance and in this sense, they have been important in strengthening relationships in both chains.

8.2 Germany

Communication. The relevance of good communication (relevance, timeliness, reliability and frequency of information) for sustainable relationships has been revealed for both stages

of the food chain: farmers-processors and processors-retailers. A high communication quality increases transparency of exchange and builds trust between partners.

Personal bonds. In the case of agri-food supply networks or chains, both economic (e.g., prices, costs and markets) and social (e.g., local ties, trust and friendship) relations are seen as being vital for success. Interaction within a supply network may take the form of acknowledgement, attention, respect, friendship and sociability, all of which can be subsumed within the concept of 'regard'.

Equal power distribution between business partners. Equal power distribution among economic partners increases the probability that rewards of the partnership will be distributed fairly among the partners, and therefore, the sustainability of economic relationships at the farmer-processor as well as at the processor-retailer level.

Key people. The more a business relationship is maintained by one key person/a few key people in an organization, the more dependent the relationship is on those people. The analysis showed that the relationship between processors and retailers seems to be less affected through key people leaving the business as relationships are handled in general not in “one voice”.

Relationship length. With increasing length of the business relationship, businesses learn to tackle relationship conflicts effectively, adjust their transaction processes efficiently and gain experience in what to expect from each other, e.g., build up trust.

Commercial reward. Evident commercial reward amongst the business partners is a key factor in building sustainable relationships, which reflects on the competitiveness of the enterprises involved. The relevance of commercial reward for economic relationships is higher between processors and retailers, as they are more economically oriented than the businesses upstream.

Competition. In contrast with what is sometimes assumed competition is not an impediment, but a key driver for businesses to collaborate in a sustainable way. This holds especially in the processor-retailer chain stage.

8.3 Ireland

Quality assurance, commitment and communication. The use of repeated market transactions in both chains appears to be an important factor in determining the success of the Bord Bia quality assurance programme, as its operation depends on clear communication flows along the chains and collaboration and commitment from all chain members.

Use of repeated market transaction. The use of repeated market transaction allows chain members to reconcile the dual objectives of business independence (chain members' personal objective) and to conduct business on a long-term basis.

“Producer clubs”¹ as devices to avoid risk. Risk avoidance, while a strongly held business principle for all chain members, was not considered to be an influencing factor in deciding relationship choice. Processors appear to understand producers’ need to avoid risk and have introduced “producer clubs” to provide farmers with the necessary security to produce cattle for specific market segments.

Trust. Trust, in buyers and suppliers, was seen by all chain members to be a very important relationship characteristic. There are, however, differences in the depth of trust amongst the chain members.

Use of higher level forms of communication. Mobile phones and emails (though these are less extended) are key means of communication in both Irish chains, and therefore, important factors for supply chain development.

8.4 Poland

Trust and complementary aims. Low levels of trust between chain partners means that they often do not notice complementarities of aims of particular partners and the whole chain.

Communication. The development of proper communication is limited by poor business links in Polish meat chains. This means that market signals which flow upstream are often wrongly understood and this in turn increases the risk of market shocks.

Short-term orientation and conflict. The management capabilities of processing plants, which often play the role of chain leader, are mainly used for ensuring better short-term performance.

Chain activity and benefit distribution. There is neither an equal share in chain benefits nor the division of risk within an average Polish meat chain. This is one of the main reasons for preferring loose and informal economic relationships.

Economic factors – the keys to success. In the Polish meat market, it is economic factors which are the key success factors to supply chain relationships. Satisfaction, commitment, innovations are of much less importance. Development opportunities are usually linked to increased domestic and foreign demand, making use of price and margin advantages, increasing benefits from the economics of scale especially at the farmers’ level, and using technical and technological progress. Efficiency of labour and other production factors is becoming increasingly more important. Three economic factors seem to be the most important:

- Retention of buyers/suppliers which means efficient competition.
- Increased market turnover leading to greater effectiveness as well as efficiency.
- Improved profitability, which is considered the main measure of performance.

¹ Some beef processing factories have developed “clubs” whereby incentives are offered to farmers who supply particular grades or breeds of animals for a premium price. These incentives include premiums, production advice and market information. Farmers who participate in clubs or produce cattle under a particular production system tend to be larger scale farmers.

8.5 Spain

High quality communication systems and personal bonds. To increase performance, stakeholders in the Spanish agri-food chains have to implement quality communication systems with their buyers/suppliers and to build higher trust, commitment and satisfaction among them. In addition, personal bonds were found relevant for explaining the economic relationships and communication in Spanish agri-food supply chains.

Agreement on joint and complementary objectives, and definition of roles. Big food distribution chains are closer to consumers and better able to interpret their wishes. So the communication between distributors and processors is critical and distributors should take the lead role. However, processors who are in between distributors and farmers, have a critical position in improving general chain efficiency. So their responsibility should be to interpret the role that all stakeholders can play in any agreement. The general objectives have to be accomplished by all stakeholders, although some of them may be of particular interest for any bi-party relationship within the chain.

Communication for developing trust, commitment and transparency. Most of the studied relationships are stable, which means that a degree of trust exists. Furthermore, common willingness to strengthen relationships requires commitment among stakeholders which can be served by better communication.

Joint planning and control of chain assets. Chain assets have a different meaning for those stakeholders who are involved in vertical co-operation agreements than for those who have a less formal relationship. Vertical co-operation agreements implies contracts and usually a clear distinction between the main partners and the rest. Planning can be better performed by the main partners in agreement with the rest of the chain. However, when the chain consists mainly of small chain stakeholders, it is very difficult to have general plans or to control common assets that affect all stakeholders.

Good communication for conflict resolution. Conflict resolution requires good communication and trust for future business involvement. It seems that conflict resolution has more personal involvement as problems gain in significance. Repeated transactions help to accelerate conflict resolution.

8.6 The UK

Joint or complementary objectives and definition of roles. For supply relationships to be successful, the businesses concerned must have common or complementary objectives that are shared by all chain members.

Mutual dependence – businesses need to be important to each other. There also needs to be a feeling that the businesses are mutually dependent. This can be fostered by, for instance, an integrated quality assurance or certification arrangement. Farmers and other suppliers need to understand buyers' requirements, e.g. product specification and service requirements, whilst buyers need to understand the challenges facing suppliers and to assist in their resolution if possible.

Personal bonds: high levels of professional / technical competence and trust. Economic interactions, expressed through markets and their prices and costs, are greatly aided by social relationships and bonds, which may embrace personal friendship and professional regard.

Good quality communication. Good quality communication, which embraces communication frequency and information quality (relevance, timeliness and reliability) and may cover market conditions, technical and logistical issues, has been found to be a vital ingredient of sustainable relationships.

Commercial benefit and its distribution. A key factor to developing highly successful relationships is to create situations where all parties benefit without anyone losing (win-win situations).

Length of relationship. Businesses which transact over a lengthy period of time get to know each other in terms of their requirements and how to meet them, how to communicate effectively and how to resolve problems.

8.7 Summary on key success factors

The country-specific analysis reveals that many of the longer established members of the EU face a similar external market environment, although there is variation in the structure of the national sectors and their supply chains. The similar environment results in several common issues being identified as success factors in economic relationships in agri-food supply chains. The following were identified as key factors for the successful development of sustainable agri-food chain relationships.

- Joint / complementary aims of chain participants are raised as a success factor in four countries (Finland, Poland, Spain and the UK).
- Communication is stressed in the findings of all study countries, being associated with chain transparency, trust and commitment development, quality assurance and the performance of individual businesses and whole chains.
- Personal bonds between chain participants are a key issue for successful relationships in Germany, Spain and the UK. Similarly, key people are identified as important to relationship sustainability in Germany.
- Very much associated with this human dimension of transaction relationships is the issue of trust which is important in Finland, Ireland, Poland, Spain and the UK, and involves issues of technical / professional competence and integrity.
- The unequal distribution of power within agri-food chains is widely commented upon and raises issues of how the benefits of supply chain activity are distributed among the participants. In some countries equal power distribution is a determinant of sustainable relationships (Germany and Finland), whilst in others an equitable distribution of chain benefits is a key factor (Poland and the UK).
- Joint planning and control of assets is also seen as an important success factor in Finland and Spain
- The length of the relationship is important for determining the goodness of relationships in Germany and the UK.

- The ability to resolve conflicts is a key issue in Finland and Spain, whilst the maintenance of business independence is particularly important in influencing relationships in Poland and Ireland.

Finally, in the Polish market, which has only recently adapted to market forces and EU accession, relations are very much focussed on economic factors with customer / supplier retention, turnover and profitability concerns dominating.

9. Policy recommendations for improving economic relationships, communication and the competitiveness of European food chains

Based on the country-specific research, policy recommendations are first identified for each country separately (section 9.1 to 9.6). The final section (9.7) of this chapter serves to sum up the overall policy recommendations derived from the research of the FOODCOMM project.

9.1 Finland

Information sharing and the use of automatic information sharing systems. One of the most important opportunities for both chains is the better exploitation of existing information. Electronic information transmitting systems should be promoted. Additionally, courses to support their usage are also needed.

Market information. Food businesses in Finland do not have enough resources to collect and exploit market information although market and consumer behaviour information is highly appreciated. Thus, there could be markets for small, easy and cheap information collecting systems or for their products.

Equal bargaining power and profitability. More specific collaboration could increase profitability and the bargaining power of rye producers and processors. Furthermore, both chains should increase vertical collaboration.

Best practices for public and education. Several public projects and organisations have developed interesting and innovative practises tailored to the needs of the food chain businesses, but they are not widely known or used. Thus, the information should be disseminated by many different ways, such as studies, consultation and information banks. Furthermore, since collaboration and integration is recommended for both chains, the first steps for collaboration is joint meetings e.g. seminars, courses and lectures, where horizontal chain partner representatives could meet. Thus, the common goals and strategies could strengthen the commitment and trust in the chains.

Vocational studies. The whole food chain suffers from a lack of skilled labour. Thus, collaboration between schools and businesses is needed. For example, combinations of vocationally studies, upper secondary school studies and training in businesses (double degree) and “godfather”/mentor systems between businesses and schools should be promoted.

Innovations. As marketing, market entry and internationalisation are expensive and difficult, especially for SMEs, collaboration in food marketing and other business activities as well as financial tools, such as loans, for developing, testing and patenting food products or innovations should be promoted.

Influences of political actions. More information about the influence of different policies and how they are handled in the whole food chain is needed.

9.2 Germany

Improving communication to increase trust. The research has indicated that a main reason for the lack of trust in the considered chains among business partners is insufficient transparency. As trust has proven to be a central factor for the creation of sustainable relationships improving the transmittance of relevant information through the chain is seen as a key factor. Policy could support this development by securing the institutional infrastructure for state-of-the-art communication facilities.

Co-operation without giving up independence. To overcome the reluctance of farmers for greater chain co-operation, processors need to point out the commercial benefit of closer forms of cooperation and ensure that those are fairly distributed. Also, an awareness has to be created that co-operation does not imply loss of control.

Despite market power, fair treatment of business partners. Retailers are the chain captains in the B2B relationships of the German agri-food chains. Unequal power distribution has proved to be a key impediment for good business relationships in Germany. The potential negative impact of unequal power can, to some degree, be offset by ensuring that benefits of co-operation are shared fairly and by improving communication.

Minimising administrative burdens ("red tape"). Existing laws could be improved regarding their practicability to the individual commodity characteristics and needs. Moreover, businesses claim to have difficulties in processing the high amount of information involved with meeting standards and following regulations. Closer collaboration between the EU Commission and national associations could help organising and sorting out relevant information and communicating it to chain stakeholders. Furthermore, by avoiding the introduction of excessive standards and by harmonizing and revising regulations to improve their practicability and better alignment to market needs could help to reduce administrative burdens and improve the development of sustainable economic relationships.

Providing adequate funding schemes. Costs for meeting the food safety and traceability standards have posed a challenge for weaker stakeholders lacking the liquidity and know-how to adopt the required technology. In addition, costs for realising such standards are unequally distributed in the agri-food chains. Financial support and educational services for weaker stakeholders could be created through pilot projects coming from the private sector. These options may become more pronounced in the EU rural development strategy and may be financed by the European Agricultural Fund for Rural Development (EAFRD).

Capacity building of chain members. The position of farmers in the chain could be strengthened by continuing to support horizontal collaboration between this group of stakeholders in producer and marketing co-operatives or associations. Policy can help to support such developments by providing funding to reduce the transaction costs associated with the establishment of horizontal co-operations. But it is not only the initial financial burden that prevents many farmers from engaging in these forms of collaboration. The fear of giving up independence is also an important impediment. Thus, the awareness that collaboration can lead to mutual benefits and does not imply reduced independence needs to be highlighted. This might be an important task for farmer unions. Capacity building can in addition be supported by policy through an improved communication with farmer associations, thus increasing the awareness regarding the needs of farmers as well as by funding education, training and extension programmes.

Supporting platform organisations. SMEs often have competitive disadvantages in an environment of vertical and horizontal concentration. Helping SMEs to build countervailing market power assists with circumventing the negative impacts of concentration processes and will improve the functioning of the value chain. One way to initiate this development is through the establishment of (online) partner-search forums and platforms, e.g., round tables, for chain actors to come together and start forming partnerships.

9.3 Ireland

Information sharing and transmission. Four recommendations are considered in this area: first, programmes need to be developed that are aimed at increasing awareness of information available within the chain and its potential impact on performance (e.g., product quality). Second, this needs to be followed by close discussion between chain members to identify information needs and frank discussion on privacy and access issues. Third, mechanisms need to be developed that ensure that relevant information is transmitted along the chain and not just between adjacent chain members. Fourth, enhanced use of ICT, such as intranets, is required.

Innovation. Current relationship types and communication are not supporting high levels of performance, particularly in relation to innovation. Chain members need to form new relationships within the broader agri-food network, e.g. with research institutes, advisory services, etc. There is also a need for a strong publicly funded research programme covering a range of aspects including quality and cost reduction.

Collaborative planning. There is a need to build on existing collaborative planning activities, such as producer clubs, by whole chain planning with the involvement of all chain members. This will require high levels of trust and long-term commitment by all parties. Public agencies may have a role to play in promoting dialogue and establishing fora but capacity building will also be a central aspect of this initiative.

Distribution of benefits. For sustainability need to be equitably distributed. Processors need to continue to devise imaginative systems to encourage loyalty and commitment. These may include simple measures such as loyalty bonuses, but could also be related to transmission of valuable information to help farmers reduce costs, etc. On the flip side, processors and retailers also need to educate farmers on the costs of meat marketing beyond the farm gate.

Ensure direct relationships between the farmer and processor. Mechanisms need to be developed to ensure that a direct relationship exists between the farmer and processor, even when an agent is involved. This will require commitment and in particular the investment of time by all parties.

Independence. The producer club initiatives of some beef processors provide good examples where independence can co-exist with collaboration to mutual benefit. These examples need to be highlighted to the farming sector.

Development of a price system that rewards quality output. Processors need to improve sales prices to encourage producers to supply in an environment where CAP support is decoupled from production. This could be achieved by segmenting the market and then developing quality-based pricing systems to reflect the demands of the different segments. Such a pricing system would require buy-in from farmers and processors.

9.4 Poland

Market information. There is the need for a market information system which reflects the current market situation and outlook. This is an important task for policymakers. Creation of such a system would contribute to the strengthening of economic relationships and communication between chain stakeholders by reducing the risks regarding farmers' sales, processors supply, income fluctuation and in addition supporting long-term orientation.

Development of a post-slaughter quality classification system and a mutual agreed system of procurement price negotiation. It is necessary to standardise the post slaughter quality classification system of carcasses as well as the classification techniques. The development of a mutual agreed system of procurement price negotiation is also important and it could bring buyers and suppliers closer to each other and weaken the present position of middlemen.

Promote market competition. It is important to ensure equal conditions for competition for all chain parties throughout the agri-food chains. This can be assisted by appropriate policy decisions which will also influence the sustainable development of meat chains in Poland. At the retail level this should be reflected in equal treatment of entities of large and small scale turnover, and avoidance of administrative steering of trade structures which limits natural market processes and supports corruption.

Strengthening the consumer's position in the supply chain. It is mainly the consumer who verifies chain effectiveness through their purchasing activities. Strengthening the consumer's position in the supply chain will ultimately affect the quality and sustainability of chain relationships. This should be done by government norms and the building of the necessary institutions as well as providing support to consumer organisations and their development. The development of IT techniques and other up-to-date communication means, assuring further development of traceability, and improving the general business culture are all measures of special importance.

Development of IT techniques and other up-to-date communication. These should not only improve the communication along the supply chains but also the relationship with consumers.

Development of appropriate training policy. Policy can support such processes through:

- training for managers from different chain levels,
- presentation of good examples and experiences,
- business extension,
- developing certification systems which distinguish products on the market.

Long-term policy that promotes collaboration. A culturally and historically conditioned unwillingness for joint activities exists in Poland. A policy which will break down this unwillingness and promote thinking on mutual or complementary goals is necessary. Such policy should be run through general and vocational education systems in order to create new attitudes among young people. Examples of successful collaborative practice in the agri-food sector should also be actively disseminated.

Development of local or regional embeddedness and involvement of chain stakeholders in local development. Such policy should be run through general and vocational education systems in order to create new attitudes among young people. The policy should act

according to the widely understood banner: “education for democracy and common development”.

Strengthening producer power. This can be done through the horizontal integration of farmers, and should help as a counterbalance to the deep inequality in power distribution within meat chains. Horizontal integration will also contribute to better performance of both farmers and processors due to the better access to technology, information and know-how. Both sides will benefit also from increased scale of production and improved product quality.

Emphasise the use of rural policy through CAP second pillar. Shifting CAP measures towards the second pillar means the limiting of market intervention and greater support for the development of regions and for societal functions and benefits by the agri-food sector, all of which will contribute to the development of closer economic relationships by chain partners in the Polish meat sector. A greater role should also be played by regional governments in EU policy implementation, in accordance with the subsidiarity principle.

9.5 Spain

Information sharing. Policy should reinforce an adequate business environment to share information and enhance chain transparency. Among many measures public administrations can provide the necessary elements to reinforce weak stakeholders in front of other stronger chain players. Public information can provide great help to provide a better bargaining balance among stakeholders and to add transparency on the entire process.

Market information. Stakeholders need good market information and this service has to be provided by public sources. Global markets make it more difficult to get information from different sources but the information assembly and analysis has to be undertaken by public administrations.

Equal bargaining power and profitability. Public norms can help to mitigate unequal bargaining power and also unfair profitability cases. This situation is easier to undertake on repeated market transactions than on vertical agreements. The latter corresponds to agreements between two parties which are difficult to monitor by public administrations. Market transparency could avoid price variations which could affect stakeholders with a different intensity.

Best practices for public and education. Best practices are difficult to achieve but at least fair solutions should be accomplished. The final aim should be to fulfil consumers’ needs and the entire chain should try to reach that objective. Agreements are not easy to reach on competitive environments and professionals should have the appropriate education to undertake negotiations. This task should be provided by public institutions.

Vocational studies. Vocational studies should create a framework to understand chain relationships and future prospects. This kind of training is better suited for professionals already working in agri-food chains.

Innovation support. Innovations are critical for the food industry and agri-food chains. It has clearly been stated that good economic relationships among stakeholders are enhanced by innovations and the same happens with communication along the agri-food chain.

Influences of political actions. Political actions can be beneficial if they take into consideration the competitive environment that global markets create. However, social imbalances need to be minimised between stakeholders with different power and consequently with unequal bargaining opportunities.

9.6 The UK

Promotion of wider use of supply chain collaboration. The promotion of collaboration would be assisted by the creation and maintenance of forums within which chain participants can come together and understand each other's interests and concerns, and identify areas and means for collaboration. Such forums may be used to identify areas requiring publicly funded support, identify and disseminate information on good practice, and assist whole sector supply chain development.

Communication and enabling market or farm performance insight. Communication quality has been found to be highly significant in the determination of significant economic relationships, with information that enables farm and supply chain performance being of fundamental importance. Businesses, particularly retailers and processors, should ensure the transmission of market and service requirements and comparative performance information (benchmark data) back to producers. This might be undertaken in a 'club', 'group' or 'cooperative' setting or for individual businesses. In addition, it will encourage the development of individual business objectives which align more closely with those of the chain as a whole. Whilst this activity is very dependent on the activity of leading supply chain businesses and organisations, there may be a role for government agencies in supporting information provision.

Commercial benefits. Commercial benefits arising from supply chain activity and their equitable distribution has been found to be of significant importance in influencing the sustainability of economic relationships in UK agri-food supply chains. Large processors and retailers, along with industry organisations, should make concerted efforts to ensure greater chain transparency in relation to the economics of their operations and of the chain as a whole. Farmer organisations / representatives similarly need to engage more on the circumstances facing producers.

Capacity building. Capacity building with respect to supply chain relationships, communication and performance involves education, training and research and extension activities to improve supplier capabilities. Competencies to be developed may be sector specific but at the farm level might involve the improvement of ICT capabilities, risk management, and information interpretation and improvement in product quality and supply service. At a processor and retailer level, focus might be placed on developing and maintaining a personal / human dimension to transactions with suppliers and buyers.

Mediation / Regulation of market power. Government led mediation, or sanction in cases of excessive use of market power, needs to be retained.

Market orientation. A pre-requisite for improving supply chain sustainability and performance is market orientation amongst producers. Agri-food policy should support this orientation, wherever it can be done without imposing social costs.

9.7 Policy recommendations derived from the FOODCOMM research

As a consequence, and in the context of “a CAP with decreasing recourse to market-intervention measures”, the FOODCOMM research results show that it is an increasingly important business ability to build and maintain effective relationships in order to integrate into or to form new agri-food supply chains. While not being the only factor, there can be no doubt that an enhanced ‘collaboration’ ability can only increase the European agribusiness sector’s competitiveness in increasingly globalised and liberalised markets in the short, medium and long term. Hence, future policy-support options should be designed to enhance the capacity of farm and firm managers to fully integrate into or to build and maintain new sustainable agri-food supply chains, for which effective relationship-management skills are a prerequisite.

The results reveal that a fair degree of commonality exists amongst those areas where policy support is requested between the study countries. Depending on the area those can be best provided by business associations, the research community or governmental agencies at the regional, national or supranational level. Thus, in this section selected recommendations for each of those three groups regarding their potential role in supporting relationship building and communication in European food chains will be summarised.

Role for associations:

Access to markets and the development of new markets is often only possible when suppliers can guarantee a consistent minimum quantity. Helping SMEs to build countervailing market power assists in circumventing the negative impacts of concentration processes and will improve the functioning of the value chain. This quantity prerequisite often cannot be fulfilled by small farms or processors. Associations are, in addition to providing horizontal integration, often an efficient means for meeting the scale requirement. They might also play a role in the promotion and implementation of new supply chain communication systems, particularly at the farm level.

- **Awareness raising activities.** Many businesses in the agri-food chain especially at the farmer stage display a strong concern for business independence. However there is limited recognition that such independence comes at a cost. Associations do have a role in increasing the respective awareness. Providing examples of co-existence between independence and collaboration to mutual benefit between members may be one way to overcome existing barriers.
- **Capacity building of members.** Working together in a voluntary chain partnership requires collaboration skills which are different from those practiced within hierarchical companies. While there are some similarities to the organisational structure of partner-based professional service companies (i.e., consulting, accounting, law firms), the governance mechanisms in vertical business partnerships are much looser – i.e., contractually less structured. Initiating, building, leading and managing voluntary vertical business partnerships requires particular collaboration skills and specific knowledge in areas such as competence-based leadership, cross-cultural communication, conflict-resolution management, third-party involvement. Associations can organise member seminars and prepare specialised training materials to enhance member capabilities in these topics.

Role for research/teaching organisations:

In this context, research/teaching organisations include both private and public ones. More broadly, consulting companies and state-run agricultural extension services also fall into this category.

- **Participating in capacity building for businesses.** For example, universities might provide workshops or seminars related to issues of B2B communication and chain

relationships. More generally, tertiary education organisations may need to (1) modify their current curricula in order to provide relevant knowledge and skills to the future generations of agribusiness managers and leaders; and (2) devise programmes and extension activities to offer training opportunities for already practising agribusiness managers and leaders (e.g., by participating in the seminars which farmer/industry/trade association offer for the member, see above).

- **Developing 'collaboration readiness' assessment frameworks.** Research may substantiate issues such as how to manage language and culture barriers in cross-European business partnerships, or the development of a framework for assessing 'collaboration capacity'. This would in particular be useful for classifying farmers and businesses, to better understand which farmer and business types are the more progressive, adaptable ones and which are the more conservative and independence-oriented ones.
- **Serving as partnership facilitators.** Formal studies have brought forth the relevant role of research organisations in serving as chain or network brokers, providing guidance in building, developing and maintaining chain relationships.

Role for government agencies:

That is, public organisations except for the before-mentioned public research organisations.

- **Offering platforms** for chain actors to come together and understand each other's interests and concerns, and identify areas and means for collaboration. Such platforms may be used to identify areas requiring publicly funded support, generate and disseminate information on good practice, and assist whole sector supply chain development.
- **Building partner-search forums** which could be either online or offline, to provide an efficient system for identifying appropriate exchange partners. This could include additional certifications to provide a basis to compensate for a lack of trust in the initial phase of relationship building.
- **Support by government agencies for research** into best practices regarding the development and implementation of agri-food supply chain and communication systems.
- **Providing financial support and educational services for weaker stakeholders.** This could be in the area of supporting SME to fulfil food safety, traceability or environment-related food standards. These options may become more pronounced within the EU rural development strategy and may be financed by the European Agricultural Fund for Rural Development (EAFRD).