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ORGANIC BOX SCHEMES

Project: Organic farming and regional development (933.316)

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Introduction to the report

The global spread of organic agriculture is both an ancient and a recent phenomenon. The two sides of organic agriculture are the old-traditional agricultural practices and the new knowledge gained through biology, ecology and various other scientific disciplines that all relate and contribute to organic agricultural production.

The production and marketing of organic products has taken many evolutionary turns. In recent decades the rise of Local Food Systems (LFS's; e.g. box schemes, direct marketing, farmer's markets, food co-ops, CSA's, etc.) has become a niche market within organic (as well as conventional) agriculture as a counter point to the incredibly large food distribution and marketing systems ending at your local supermarket. LFS's may be one way to move the overall food system into a more environmentally friendly and socially just direction. But, LFS's typically only involve small numbers of farmers and consumers, and therefore have limited impact on the overall food system. One possible example to scale up local organic food systems are box schemes that deliver organic products from different farms to consumers. Box schemes have gained importance in organic markets especially across Europe and North America. They provide an opportunity to scale up direct marketing strategies by aggregating products from multiple producers and efficiently assembling and delivering them to a large number of consumers. Box schemes attract consumers based on the distinctive attributes and values associated with the food. While it is positive that these systems can supply more interested consumer with local organic products, critical issues may emerge: the food in the boxes may become less local and less seasonal, and communication and exchange between the involved actors may diminish.

The overall question that we will try to answer in this project is how such box scheme systems can manage growth in such a way that goals and values like local production, social justice and communication between producers and consumers are supported. The fundamental issue these LFS's seek to address is the loss of contact between the producer of the food and the consumer, to reestablish an intimacy, which has been lost as one wanders the sterilized aisles of your local super market.

This report seeks to make the reader familiar with the current global state of box schemes, and hence is the focus of this report. This particular form of a LFS was chosen because of its appeal to consumers who demand the convenience and variety made possible by customizable food boxes being brought to their front door, as well as the promise of reconnecting consumers with the source of food production.

The many contributors to this report, students of the master program Organic Agricultural Systems and Agroecology at the University of Natural Resources and Life Sciences in Vienna, Austria (Universität für Bodenkultur Wien), as well as our professor Dr. Susanne Kummer, surveyed across the globe including countries in western Europe, North America, Australia, eastern Europe, among others. The primary tool employed was an online survey, but also included email interviews, Skype interviews, and in-person interviews.

In this report we examine concrete examples of organic box schemes and investigate the following issues and **research questions**:

- Procurement strategies (Where do the products in the boxes come from?)
- Organization (How are the different actors, such as producers, processors, intermediaries, consumers etc., involved and organized in the box scheme?)
- Size/scale and growth of the box system (How did the box system reach its current size? How did it manage the growth process?)
- Values and attributes associated with the box scheme (Which distinct values does the box scheme communicate to its consumers?)

Overview on methods used in the project

In order to cover organic box schemes in different geographic areas all over the world, the class group was divided into smaller teams, each with a particular focus in a region. These teams covered the following regions: Austria, Western Europe (France, UK, Belgium), Southern Europe (Italy, Croatia, Serbia) and Russia, North America (USA and Canada) and Australia. The teams contacted box schemes in the respective region and asked them to fulfil an online survey and, when possible, to realize a more in-depth interview via Skype or e-mail. Additionally, a literature group which focused on literature review about alternative food networks including producers as consumers, producer-consumer partnerships (CSAs), direct sell initiatives and specialist retailers, and with a special focus on (organic) box schemes, was created to support the findings of the other groups with existing literature.

For the development of the survey, each group made a suggestion about possible important questions relating the box schemes. These suggestions were discussed in class with all the groups together and a final questionnaire of 35 questions for the survey was established. The survey was created using LimeSurvey, and the questions where translated into all the necessary languages from the different countries included in the study. The total amount of questions was divided into groups of questions, including general information, size and growth, products in the boxes, producers and partners, advertising, order and delivery, communication, and visions and values.

The box schemes in the respective regions (**Table 1**) were sampled based on an internet search in each region, using the key words *box schemes, vegetable boxes, vegetable baskets, delivery boxes,* translated to the respective languages, but also other terms that were appropriate in the context of the specific country or region. In total, 81 box schemes answered the online survey. Apart from the quantitative survey data, additional semi-structured interviews (per Skype, e-mail or in personal interviews) were carried out to complement the survey results. More detailed information on the methods applied can be found in the methods chapters of the respective team reports.

Table 1: Sampling strategy and response rates of the regions under investigation

Team	Regions	Sampling based on	Nr. of box schemes contacted	Nr. of responses (response rate)
Austria	Austria	List of Umweltberatung and Bio Austria, additional internet search	43	15 (35%)
Western Europe	France	Members of AMAP organisation	192	17 (9%)
	UK	Internet search, list at vegbox-recipes.co.uk	147	18 (12%)
	Belgium	Internet search, members of GASAP	21	5 (24%)
South Europe & Russia	Croatia, Serbia, Italy, Russia	Internet search	77	14 (18%)
North America & Australia	USA, Canada, Australia	Internet search	56	9 (16%)
		Sum	**536**	**78 (15%)**

THEORETICAL BACKGROUND OF ORGANIC BOX SCHEMES – LITERATURE REVIEW

GEORG IWANOV, ANNA SCHIEFER, ANGELA FUNK

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Introduction: Definition of Organic Box Schemes

One of the most common definitions of the term “box schemes” is marked by VIDAL et al. (2011): “Box schemes consist on a regular delivery of a box of seasonal fruits and/ or vegetables, cultivated in the vicinity at a specified point using subscription.” For sure this is a relatively general definition because nowadays even other products than fresh ones produced on the own farm are offered. But nevertheless this is a universal approach when dealing with box schemes as one possibility for alternative food networks. Main characteristics of box schemes are the regular delivery, product range and limited customer choice, as well as the supply variety, the reliable delivery, the price/ quality ratio and the high quality (VIDAL et al., 2011). The overall goal is the maintenance of short distribution channels in a growing environmental market and support of the farmers (VIDAL et al. 2011). Box schemes as part of local food systems as alternative ways of distribution are one popular and emerging concepts. Most often the box schemes offer fresh organic and local products, aiming at being ecologically, economically and socially sustainable (BROWN et al., 2009). Box schemes can also be seen in the context of fair trade: One aim is the fair relationship between consumers and producers (DUBUISSON-QUELLIER, 2008). This is closely tied to the general idea of box schemes promoting social and economic sustainability.

Methods

For answering the research questions in this theoretical part of the report literature research was used as methodology. For finding appropriate literature first of all a definition of keywords is necessary to have a uniform understanding of the actual topics. In our literature research we first searched for the terms “alternative food networks”, “organic box schemes” and “box schemes”. We used the following databases for our research: Scopus, organic e-prints, google scholar, Researchgate, Science Direct and BOKU-Litsearch. The criteria are that the literature is in English language and not published earlier than in the year 2000.

As one example an overview with the listed results and its particular restrictions of the database BOKU-Litsearch is shown in table 2:

Table 2: First results of the literature research in BOKU-Litsearch (Source: own presentation)

Criteria/ Expression	Number of Results
Alternative food networks	342.735
Restriction: only online available complete texts	119.251
Restriction: only articles in journals	16.118
Since the year 2000	14.559

Due to the high number of results the first pages of the offered literature were looked over and articles that made an interesting and appropriate impression were chosen for further checks.

Also for the research in the Science direct database the research is documented in table 3:

Table 3: Advanced process of literature research in Science Direct with several restrictions (Source: own presentation)

Criteria/ Expression	Number of Results
Alternative food networks	87.450
Restrictions:	10
In abstract, title, keywords	
Open Access articles only	
Only articles and review articles	
From the year 2000 till the presence	

RANDOLPH (2009) provided a guide for the writing of literature reviews. Following his taxonomy, the focus of this literature study lies on the research outcomes because it is an "information analysis and synthesis, *focusing on findings* and not simply bibliographic citations, summarizing the substance of the literature and drawing conclusions from it (RANDOLPH 2009 after Educational Resources Information Center 1982, p. 85). The goal is the identification of central issues concerning box schemes as one part of alternative food networks under a neutral perspective. The readers of this study should be persons that deal with box schemes in their job or are simply interested in the topic.

The overall purpose of this seminar paper is to offer a theoretical background about organic box schemes, its history, development and answering the research questions based on findings in already existing literature. This should also be an assistance for the seminar groups working with a questionnaire and doing quantitative research. The theory should on the one hand provide a base for the practical investigations of the other project teams doing the online survey with organic box schemes, and on the other hand be a supplement for the overall answering of the research questions.

A brief history of Alternative Food Networks (AFNs)

Alternative Food Networks have various traditions all over the world. This paper concentrates mostly on Organic Box Schemes which are a part of AFNs and have been emerging from different roots. The first part of the paper will discuss the reasons why different AFNs were developed at all and the various kinds in different parts of the world which have been formed. Later on the focus will be on the history and growth of Organic Box Schemes.

Emergence of AFN´s

Since the 1960ies there has been constant protest against political systems all over the world. But only a little part of all this activism has been successful. Yet the wish to change the system in a certain way prolonged. Goodman et al. (2011) point out that the fail of social political activism amongst others led to other ways of wanting to change the world and consequently to the formation of alternative food movements. But not only political reasons induced the longing for a nonconventional food system but also issues like the growing concern for the environment, food scandals (FORSELL, LANKOSKI, 2015), worries about animal welfare and mass production in general and the simple mistrust people have been articulating against conventional food production (RENTING et al., 2003). Also the liberalization of the market and the following power of huge supermarket chains (SEYFANG, 2008) and not least the growing imbalance between the global north and south with millions of people suffering of famine and malnutrition led to a rethinking in a considerable part of the population (GOODMAN et al., 2011).

Roots in different parts of the world

There are various roots of AFN´s independent of each other. Just a few of them will be described in this chapter.

Germany - Rudolf Steiner

Rudolf Steiner, an Austrian philosopher and esoteric, founded in 1924 in Germany the biological dynamic agriculture. According to Steiner an agricultural farm is an independent, living being where people and land work as one. Biological dynamic agriculture was introduced in a time when agricultural mass production started (through artificial nitrogen fertilization) and a few farmers became unsatisfied with the quality of agricultural products. Steiner therefore presented a form of agriculture without any kind of chemical fertilizers, pesticides or insecticides, and with the focus on interaction of people, animals, planets and the cosmos. Although this system is often criticized as being esoteric it has still a lot of supporters and can be seen as one of the roots of Alternative Food Systems (VOGT, 2001).

Japan-Teikei

Teikei, which means partnership, is a Japanese version of alternative food networks which was founded in the late 1960ies. Similar to Community Supported Agriculture (CSA) it is based on a partnership between farmers and consumers and aims to secure small holder farmers and organic agriculture in general. Similar to other AFNs it emerged through the mistrust of people against conventional agriculture, in this case especially concerning health issues through chemicals brought out on the fields. Today over one million people in Japan take part in Teikei. Usually it is based on a direct distribution system and an exchange in working hours and money (KONDOH, 2011).

USA- Community Supported Agriculture (CSA)

Although the first CSA farm was established in Switzerland in 1978 (VOLZ et al, 2016) it became really popular in the United States when the founder of a German CSA farm founded one there in 1986 (ROOS et al, 2007). Although there are many different forms of CSA´s today they are all based on a relationship between farmers and consumers. This relationship can be simply by economic means as the consumer pays his or her share of the agricultural production at the beginning of the year and is supplied with food in return. But it can also involve more personal relationship like work for food and rights of determination what happens on the farm. Today there are several thousand CSAs all over the US (HALDY, 2004).

History and Growth of Organic Box Schemes

The roots of Organic Box Schemes go back to the first CSA in Switzerland (Les Jardins de Cocagne) founded in 1978, which delivered its produces in boxes to their members (VOLZ et al, 2016). The first original box schemes started in Germany and the Netherlands in the mid 1980ies. According to literature the initiative started in the Netherlands with the Warmonderhof in 1983 and in Northwest Germany at about the same time (HALDY, 2004).

One of the earliest Box Scheme systems was also established in Denmark in 1985. An association of farmers founded a way to deliver their organically produced fruits and vegetables in Zealand. The rest of Scandinavia joined in the 1990ies (TORJUSEN et al, 2008)

The first box scheme in the United Kingdom dates back to 1991 and was established in Devon (BROWN et al, 2009).

In France Organic Box Schemes mainly exist through AMAPs (Association pour le maintien de l'agriculturepaysanne), a type of CSA which delivers their organic produces to their customers weekly. It first emerged in South Eastern France in 2001. Customers are heavily involved in the farm and are supposed to work there on a regular basis. (LAMINE, 2008).

All in all it can be said that even though the first box schemes already emerged in the 1980ies, most of European countries (also Austria) joined in the nineties to sell organic food via boxes. But ever since there has been a tremendous growth all over. This doesn´t just concern the number of farms offering boxes but also the size of companies and number of boxes sold per week (KILCHER et al, 2011). The biggest companies are placed in England around London selling up to 50,000 boxes per week. All in all there are over 600 providers all over England. But also if AMAP is viewed as an organization it has grown exponentially since its foundation. Today there exist several hundred AMAP organizations all over France (LAMINE, 2008). In Germany an association called Ökokiste has been founded and is the header of several hundred providers of organic boxes (VOGT, 2001).

The reason for the growing demand of Organic Box Schemes is not only the before mentioned concern of the population about conventional agriculture, but also the types of the organic boxes changed drastically. Was it at the beginning only individual farmers or small cooperatives usually offering one type of box per week with products from the farm itself, in the meantime the market has grown massively often dominated by big associations offering not only local food but products from all over the world. HARDY (2004) shows that the demand for organic boxes has grown exponentially with the magnitude of the offer on the farmers or the retailers side respectively. It can be seen that at the beginning when the boxes were farm based and there was only one type of box, box schemes used to deliver between 50 and a few hundred boxes per week. Later on the development shifted towards retailers not only offering products from local farmers. Consumers can now order almost anything they want. Also the ordering system nowadays is mostly provided by an internet shop. Consequently there are retailers now delivering up to many thousand boxes per week. Organic box schemes became so popular that there are also supermarket chains that joined in the market and deliver organic boxes to households (SEYFANG, 2008).

Alternative Food Networks: Terminology and Characteristics

Within the last decade, the emergence of new types of producer-consumer cooperation in food networks has been progressively documented. This observation runs parallel and partly in opposition to dominant globalization and concentration trends in food markets (RENTING, 2012, 289; ROEP et al., 2012; SCHERMER, 2015). Various theoretical perspectives studying the new consumer-producer relations are using different conceptual headings, such as "Alternative Food Networks", "Civic Food Networks", "short food supply chains", or "local food systems", just to name a few of them (RENTING, 2012;. DUBUISSON-QUELLIER et al., 2014;

VENN et al., 2006). In the study of our case we focussed our literature research on the term Alternative Food Networks (AFNs) to get an overview about recently ongoing research and a holistic understanding where our topic of interest (Organic box schemes) might be placed within the emerged food network.

AFNs have turned into a multifaceted world consisting of different forms of organization in the agri-food system. Despite their differences, the common fact is to represent an alternative to the mainstream market (BARBERA et al., 2016). Moreover, the distinction between alternative and conventional is problematic since it is not static and boundaries between alternative and mainstream are dynamic over time. These shortcomings of conceptional understanding suggest a need to explore alternative perspectives in the food system dynamics (RENTING, 2012). Overall, in contrast to the standardized industrial modes of food supply, AFNs shows different ways to link food production, distribution and consumption and create new models that engage public concerns about community, social justice, health issues such as nutrition and food safety, and environmental sustainability (FAAN, 2010).

These alternative supply chains can assume very diverse forms, ranging from completely isolated and self-interested experiments to extremely networked and community orientated initiatives. Concerning the high variety and differences, almost all cases of AFNs share the characteristics of being self-organized, with a central role of local individual actors, and a rather slight involvement of institutions (BARBERA et al., 2016).

Furthermore, AFNs vary in character between countries. In Europe for example, the meaning of “food quality” for Southern countries is strongly shaped by the context of production, tradition and local knowledge, whereas Northern and Western Europe quality criteria may concern environmental sustainability or animal welfare. Many AFNs strongly focus on shortening food chains, with one of the aims to encourage close relations between food producer and consumers and promote more environmentally sustainably modes of production (RENTING et al, 2003; FAAN, 2010).

Organic box schemes in the categories of AFNs

The bigger part of literature concerning AFNs refer heavily on reviewing the emergence and development, as well as investigating the producer-consumer relationship of the new food-networks. To identify and compare different AFNs to be able to result in a classification scheme, methodological processes are confronted with some difficulties. This appears in a debate about what actually constitutes AFNs as well as the breadth and size of the AFN population. Problematizing the understanding of what might be considered “alternative”, research is helping to recognize that the whole notion needs to account for the entire range of stakeholders involved, including consumers (VENN, 2006). In trying to categorize organic box schemes within AFNs the paper from VENN et al (2006) appeared to be a good support for our group debate. This paper presents some methodological considerations to identify and examine these networks and is based on a context analysis of reviews of methods and case studies identified in the key literature and outlines. Four different categories had been investigated to differentiate the schemes according to their relative “connectedness” of food consumers to the act of food production. In *Table 4* the four different categories are listed, whereas category three plays the most important role for our case study. “The direct sell” category facilitates closer producer-consumer relation, either through face to face or spatially extended supply chains, offering consumers the chance to procure food with visible provenance. The consumer contact is mostly confined as a single moment, most likely at the point of purchase, but may not necessarily be one-off occurrences, but can also be regularly (VENN et al, 2006).

Table 4: Categories of AFNs after VENN et al (2006)

Category	Explanation	Examples
Producers as consumers	Schemes were food is grown or produced by those who consume it and usually sold on a local level	• Community gardens • Community centres with specific food projects • Community food cooperatives • Allotment groups
Producer-consumer partnerships	Partnerships between farmers and consumers; risk and rewards of farming are shared	• Community Supported Agriculture (CSA)
Direct sell initiatives	Farmers or producers cut out the middlemen and sell direct to consumers; direct, face to face or over the Internet	• Farmers markets • Farm gate sales • Adoption/rental schemes • Mobile food shop • **Box schemes** • Producer cooperatives
Specialist retailers	Enables a more direct sell to consumers than through conventional supermarkets; often high value-added, quality or speciality food, may be targeted at tourists	• Online grocers • Specialist wholesalers • Tourist attractions

Consumers' decision and consumer-producer relationship

AFNs constitute an organized flow of food provisioning that connect people who are concerned with the morals of their consumption practices in some way with those who want a better price for their food or counter the dominant (conventional) market logic (MAYE et al., 2010). The most common suggestions about fundamental principles of local food systems mostly include (1) the reconnection of producer and consumer, (2) the direct exchange through which this occurs, and (3) the shared goals and values that underlies the system. Overall these portrayals may speak to the potential of local food systems, but not their realities (MOUNT et al., 2012).

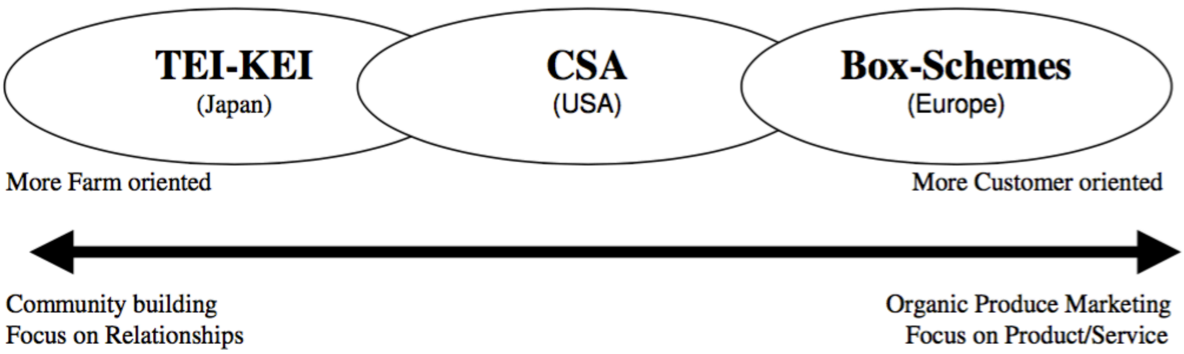
Concerning consumers interest in AFNs one of the reason is that consumers are now more interested in food, generally; they want to know where their food comes from and how it was produced. Consumer confidence studies show that the growth in alternative food markets was a consequence of addressing deficits in disembedded trust, widening chains of interdependence, a succession of food scares and the introduction to GM technologies. Their anxieties have provided motivation for the growth of AFNs and put a greater emphasis on food quality (MAYE et al., 2010).

Distrust arises when consumers experience a discrepancy between the expectation and the performance of the food system, or with changing and unsecure responsibilities. Changes in the organic food system therefore need to be balanced by evolving consumer expectations and the other way around (THORSØE, 2015). In particular, consumer experience this discrepancy through food scares like for example the horsemeat scandal or pesticide residues. The emergence of AFNs is seen as a reaction to the uncertainties during the modernisation of food system. Shortened food chains therefore is an important feature of AFNs that supposedly bring consumers closer to their origins of their food. Generally, trust seems to be an important component in food communities to facilitate co-operation between producer and consumer. To empirically explore the function of trust seems to be a crucial point in understanding the functional mechanism and a new approach to understand social relations of AFNs to furthermore qualify multiple ways of expectations of the food system (THORSØE et al., 2016).

Categorization of box scheme services

In a global perspective there are three main systems of box scheme systems. As shown in Figure 1, the focus of the three systems differs. These are summarized under the term "Organic Food Subscription Systems" (OFSS). These are defined as "a composition of dominantly fresh organic produce, designed and packed into a box or bag by a farm or trading company, subscribed by the end-customer on a regular basis, and delivered to a place the consumer has agreed on" (HALDY 2004, 4).

Figure 1: Focus of the three different OFSS (Source: HALDY 2004)



In the western culture individualism and and personal benefits are the central topic whereas the group building and orientation towards relationships is more important in Asia (HALDY 2004). The TEI-KEI system is the originally Asian variant of OFFS (HALDY 2004). It is basically an agreement between farmers and consumers where the members of the TEI-KEI group every week pay a fee and get back a box with fresh products without knowing what´s the content before. The customers help directly on the farm and are also allowed to contribute to decision makings like the choice of crops sown (HALDY 2004). On the organic market the TEI-KEI system is however not that important due to its distribution mainly in Asia. Also a lack of information about it in English (and not in Japanese) language is a reason for this (HALDY 2004).

The CSA system is quite a big movement in the US ad is already described above. In contrast to TEI-KEI and CSA which are supportive OFSS the box or bag schemes are commercial ones (HALDY 2004). The portfolio of these commercial OFSS consist of several box types and different box sizes. Typically the companies offer three sizes of vegetable boxes, two sizes of fruits (HALDY 2004). But the development is toward more specialized boxes that are tailored to the customer like e.g. for elder people, only seasonal special boxes, full-meat boxes etc. (HALDY 2004). The importance and extend of the providers of box-scheme services is mainly depending on the stage of market development (HALDY 2004).

There are also certain problematic issues for the consumers like the limited range of products. Box schemes are still a niche of the market. Sustainable agriculture like e.g. organic box schemes could have a bigger impact on the market. To achieve this sustainable agriculture has to become more accessible. This means that distribution and marketing as well as the prices have to be feasible to the mainstream market (BROWN et al., 2009).

Differences between countries

There are several case studies for single countries in mostly Europe and the USA made. For the southern hemisphere (mainly Africa) there are not that much experiences documented (HOEKSTRA et al. 2010). One special case is an urban gardening project South Africa. A social enterprise stands behind it and works with not that well situated persons in urban areas which produce vegetables there and provide it via box schemes. In this case the main goal is to have a starting point for economical and personal growth and an instrument for the relief of poverty there (HOEKSTRA et al. 2010). This is a good example for the huge differences between the countries. These depend from the respective geography, culture, development of techniques and economy (HALDY 2004).

In the UK for example there are few big companies acting on national level with imported products which actually has not been the original sense of the box scheme system (BROWN et al., 2009). In French on the other hand the relationship of the people with agriculture is stronger and therefore it is more common to buy from the farms directly. Here the differences between France as an “agricultural and food power” and England as an “Industrial power” still seem to persist (BROWN et al., 2009). Therefore, in France alternative food concepts like CSA are also more common.

References

Barbera F.; Dagnes J. (2016): Building Alternatives from the Bottom-up. The Case of Alternative Food Networks. In: *Agriculture and Agricultural Science Procedia* 8, 324–331. DOI: 10.1016/j.aaspro.2016.02.027.

Brown, E., Dury S., Holdsworth M. (2009): Motivations of consumers that use local, organic fruit and vegetable box schemes in Central England and Southern France. Appetite 53, 183-188.

Dubiosson-Quellier S.; Lamine C. (2008): Consumer involvement in fair trade and local food system: delegation and empowerment regimes. In: *Geo Journal, Springer Verlag* (73/1), 55–65.

Faan project team: Karner S., Dower M. (2010): Local Food Systems in Europe. Case Studies from five countries and what they imply for policy and practice, latest checked on 07.06.2016.

Forssel S., Lankoski L.: (2015): The sustainability promise of alternative food networks: an examination through „alternative" characteristics. Agric Hum Values (2015) 32, 63-75

Goodman D., DuPuis E.,Goodman M. (2011):Alternative food networks: knowledge, practice, and politics. London:Routledge

Haldy, H.-M. (2004): Organic Food Subscription Schemes in Emerging Organic Markets: TEI-KEI, CSA and Box-Schemes. In: *Proceedings of the 6th IFAOM-Asia Scientific Conference*, Research Institute of Organic Agriculture, 174-189.

Haldy, H.M. (2004): Organic Food Subscription Schemes in Germany, Denmark, The Netherlands and the United Kingdom. Definitions and Patterns of Development in an International Context. Birmingham: Aston Business School

Hoekstra F., Small R. (2010): Vegetable Box Scheme in Cape Town, South Africa. Urban Argiculture magazine. September 2010. 24, 17-20

Kilcher L., Willer H., Huber B., Frieden C., Schmutz R., Schmid O. (2011): The Organic Market in Europe: 3rd edition March 2011, SIPPO, Zurich and FiBL, Frick.

Kondoh K. (2015): The alternative food movement in Japan: Challenges, limits and resilience of the teikei system. Agric Hum Values (2015) 32, 143–153.

Lamine C. (2008): Local food networks and the change of the agrofood system. 16th IFOAM Organic World Congress, Modena, Italy.

Maye D., Kirwan J. (2010): Alternative food networks. In: *sociopedia.isa*.

Mount P. (2012): Growing local food. Scale and local food systems governance. In: *Agric Hum Values* 29 (1), 07–121. DOI: 10.1007/s10460-011-9331-0.

Randolph J.J. (2009): A guide to writing the dissertation literature review. Practical assessment, research & evaluation. Vol 14 No 13.

Renting H., Marsden T. K., Banks J. (2003): Understanding Alternative Food Networks. Exploring the Role of Short Food Supply Chains in Rural Development. In: *Environ Plan A* 35 (3), 393–411. DOI: 10.1068/a3510.

Renting H., Schermer M., Rossi A. (2012): Building Food Democracy: Exploring Civic Food Networks and Newly Emerging Forms of Food Citizenship. In: *Int.Jrnl. of Soc. of Agr. & Food* (Vol. 19, No. 3), 289–307, latest checked on 09.06.2016.

Roos G., Terragni L., Torjusen H. (2007): The local in the global – creating ethical relations between producers and consumers. *Anthropology of food* [Online], S2 | March 2007, Online since 20 April 2007, connection on 09 June 2016. URL : http://aof.revues.org/489

Roep D., Wiskerke J.S.C. (2012): On Governance, Embedding and Marketing: Reflections on the Construction of Alternative Sustainable Food Networks. In: *Journal of agricultural & environmental ethics* 25 (2), 205–221. DOI: 10.1007/s10806-010-9286-y.

Seyfang G. (2008): Avoiding Asda? Exploring consumer motivations in local organic food networks. Local Environment Vol. 13, No. 3, 187–201, April 2008

Schermer M. (2015): From “Food from Nowhere” to “Food from Here. ” changing producer–consumer relations in Austria. In: *Agric Hum Values* 32 (1), 121–132. DOI: 10.1007/s10460-014-9529-z.

Thorsøe M. (2015): Maintaining Trust and Credibility in a Continuously Evolving Organic Food System. In: J Agric Environ Ethics 28: 767-787. DOI: 10.1007/s10806-015-9559-6.

Thorsøe M., Kjeldsen C. (2016): The Constitution of Trust. Function, Configuration and Generation of Trust in Alternative Food Networks. In: *Sociol Ruralis* 56 (2), 157–175. DOI: 10.1111/soru.12082.

Torjusen H., Lieblein G., Vittersø G. (2008): Learning, communicating and eating in local food systems: the case of organic box schemes in Denmark and Norway. Local Environment Vol. 13, No. 3, 219-234.

Venn L., Kneafsey M., Holloway L., Cox R., Dowler E., Tuomainen H. (2006): Researching European "alternative" food networks: some methodological considerations. In: *Area* (38.3), 248–258.

Vidal F. (2011): Analysis of the relation between organic products consumption and box schemes use in Alicante (Spain). Agricultural Sciences Vol.2, No. 4, 505-510.

Vogt G. (2001) Geschichte des ökologischen Landbaus in Deutschland. *Ökologie & Landbau*, 118 (2/2001), 47-49.

Volz, P., Weckenbrock, P., Gressot, N., Parot, J. (2016): Overview of Community Supported Agriculture in Europe. CSA Research Group. Urgenci.

ORGANIC BOX SCHEMES IN AUSTRIA

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Introduction

Organic farming and the demand for its products increases not only in Austria but worldwide (The World of Organic Agriculture 2015).

Austria is well known as one of the World Champions in organic farming and looks back on a long history that started already in 1927 when the first Austrian organic farm began its work. Austria's organic sector experienced first real growth in beginning of the 1990ies due to preparations for joining the EU. Before 1992 there existed less than 2000 organic farms whereas by the year 2014 the number was 21 810 which accounts for 16.9% of all agricultural farms in Austria and constitutes the highest percentage of organic farms in Europe (FURTSCHEGGER, C., and SCHERMER M., 2015)

The increase of organic production is closely related to the direct payments offered by the Austrian government, which especially supports farms during and after conversion to organic through compensatory payments. Additionally, favourable market conditions through the entrance of supermarket chains, the establishment of a marketing company, an active policy by the organic associations and the development of advisory services lead to popularity and growth of the organic sector (FREYER et al., 2001). Up to now, the distribution of organic products is dominated by sells in conventional supermarket chains and discounters covering about two-thirds of annual turnover (67%). Besides, 14% were sold via specialized retail trade (organic/health/nature shops), 7% via direct marketing, 7% went to export (corresponding to approximately 66 million Euros) and 5 % to catering (KILCHER et al., 2011).

Further development of the organic sector and its key markets is being under ambiguous investigation. A growing demand of regionality and sustainability in food consumption might lead to increasing markets but may also result in a bifurcation of organic agriculture and its exposition to conventionalization processes. One approach to avoid the latter is supporting direct marketing strategies such as box schemes.

Biohof Achleitner was the first to offer home delivery of fruit and vegetable boxes in 1998 and is nowadays regarded as pioneer in Austrian organic box production. Since the late 1990ies Austria experiences a growing trend of consumer behaviour towards organic products and alternative distribution networks and the number of box providers substantially increased (FURTSCHEGGER, C., and SCHERMER, M.; 2015).

As box schemes constitute a promising option to scale up local organic food systems (KUMMER S., HIRNER, P., MILESTAD, R.; 2015) this report aimed to gain an overview on the situation of Austrian box scheme providers, their individual history, growth, range and origin of products, marketing and future outlook by conducting an online survey among box schemes in Austria.

Methods

In the beginning of March 2016 the team was formed, time and work plans fixed and research questions defined. In the following weeks a questionnaire was created on the foundation of existing literature and group discussions, which had to be translated to the countries' languages of individual working groups. Subsequently an online survey was created on "Limesurvey" and sent out to all Austrian box scheme providers that could be encountered via online information provided by "Umweltberatung" and "BioAustria" (in total 43 providers) on March 25th 2016. Due to low response rates in the beginning, reminder Emails were sent to participants who had not answered yet or delivered unfinished answers at following dates: 1.4., 13.4., 28.4. and 2.5.2016. The survey was closed for participation on May 10th 2016 having achieved a response rate of about 35% by only counting completed surveys, which were thus 15 in total. Additionally, 18 box schemes did not complete the survey, one box scheme rejected the survey via E-Mail, and nine box schemes did not react on the invitation to the survey. In continuation, we will only analyze and discuss the 15 completed answers to the survey.

In addition to the online survey two more detailed personal interviews were conducted with two well-known organic box distributors in Austria Biohof Achleitner and Biohof Adamah.

General situation and development of box schemes in Austria

From the 15 box schemes that answered the survey, the first box scheme was launched in 1990 in Lower Austria and boxes there are still arranged by the owner personally. Since 2010 six box schemes out of 15 started with the two "youngest" existing since 2014. 12 out of 15 box schemes that participated in the survey are organized as "business company" (one described his box scheme as retail business) whereas only three are denoted by "farm" (one is both). Comparing the year 2015 to the time of their individual start the number of boxes sold per week increased in a quite similar rate for most box schemes and only two experienced a tremendous annual growth rate with around 5-fold increase of the number of sold boxes each year since their start. The rest can report an average of 33% increase of the number of sold boxes per year. The amount of boxes when a box scheme was launched differed from 10 to 250 boxes per week. Also today, the number of distributed boxes varies profoundly from 25 to 7500 boxes per week. The average is 283 boxes per week when excluding two outstandingly big producers which sell 5000 and 7500 boxes per week respectively.

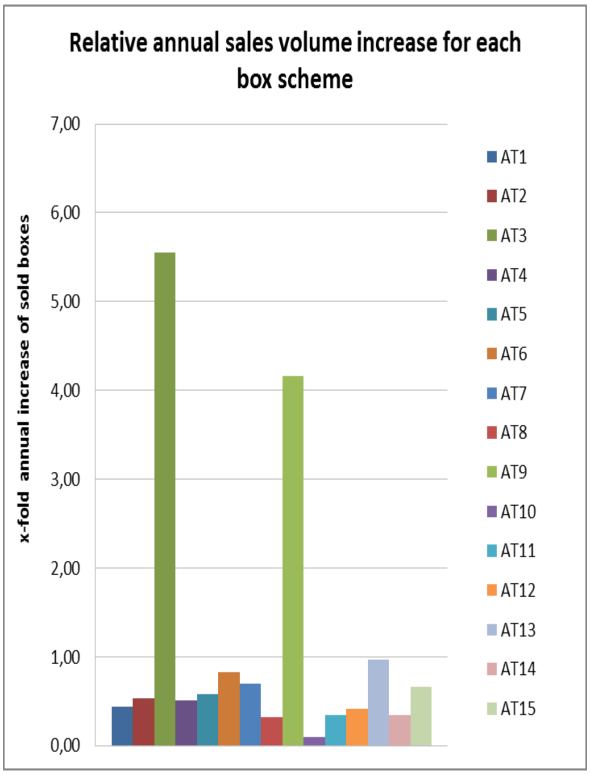


Figure 2: Annual increase of the number of sold boxes for each box scheme (n=15)

It can be estimated that the sells volume alone doesn't indicate the size of the box scheme itself, as many also run other businesses like farm shops, market stands or trading business.

One other indicator for size is the number of employees, which ranges from zero to 120 (eventually additional seasonal workers) and averages 19. Once more this average significantly changes after exclusion of two big producers (who both employ 120 workers) to an average of 3 to 4 workers per box scheme.

Only two box scheme operators stated that they didn't intend to increase the amount of sold boxes, arguing with little labor capacity or that it is simply enough.

Products in the boxes and their origin

The majority of box schemes offers at least fruit and vegetables in their boxes, but more than 50% also deliver dairy and cereal products, oil, vinegar, non-alcoholic beverages, tea or coffee and conserved or convenience products. Also meat or fish can be ordered in one third of the boxes without any significant trend concerning the size of the box scheme. In general, also small providers may have a wide range of products, but it is observable that either there is a broad range or the box scheme only focusses on fresh fruits and vegetables without any additional components in the box. Only the two biggest box providers supply customers with all mentioned products in the survey except clothes, which are not covered by any of the respondents.

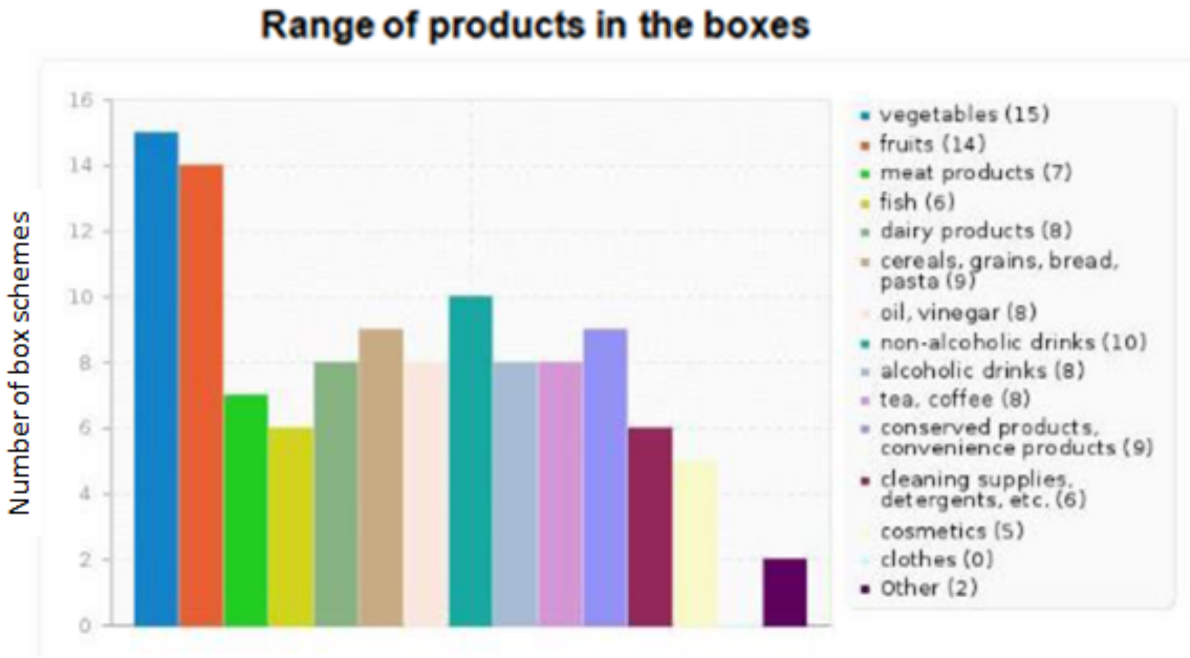


Figure 3: Range of products in the boxes of the interviewed box schemes. (n=15; multiple answers possible).

Concerning the origin of the products in the boxes all providers state that they deliver certified organic products, although two box (rather small) schemes add products that were either produced organic but not certified (one provider) or conventional (second provider) and in both cases make up around 10% of the box content. Although all box schemes claim to offer regional products their estimation of the term “regional” (in km distance to box providers’ farms) differs considerably and ranges from 10 km distance to 400 km with an average of 170 km. 11 out of 15 respondents sell imported products that they receive via trading companies or more rarely directly from farmers.

Figure 3 shows the proportions of products within certain distances. It can be observed that these proportions vary and not all providers offer products of own produce while others don't obtain any goods from more than 500 km distance. Only two of the responding box schemes, don't deliver products than come from farther than 100 km.

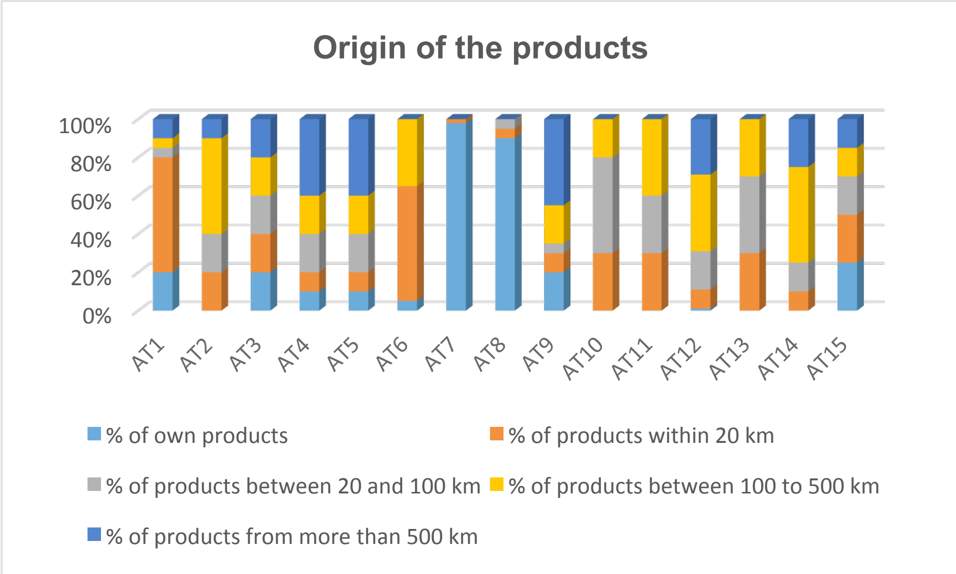


Figure 4: Origin of the products of the interviewed box schemes (n=15).

Further the number of products suppliers such as famers, traders and processors (e.g. dairies, bakeries) that deliver for box schemes varies. One survey participant didn't give any information concerning these numbers, so figure 4 shows results for 14 box schemes.

One box scheme doesn't receive products from other farmers and only cooperates with one trader. The highest number of farmer suppliers for boxes is 50, but only 4 box schemes have more than 30 farmer suppliers and 30% receive goods from 5 suppliers or less. Concerning processors, one box scheme stands out with 58 different deliverers but the rest of the participants have 20 or less deliverers of processed goods. The number of traders in cooperation with box schemes ranges from zero to 30, but averages 5 traders. 30% of the respondents rely on one trader only and one doesn't cooperate with any.

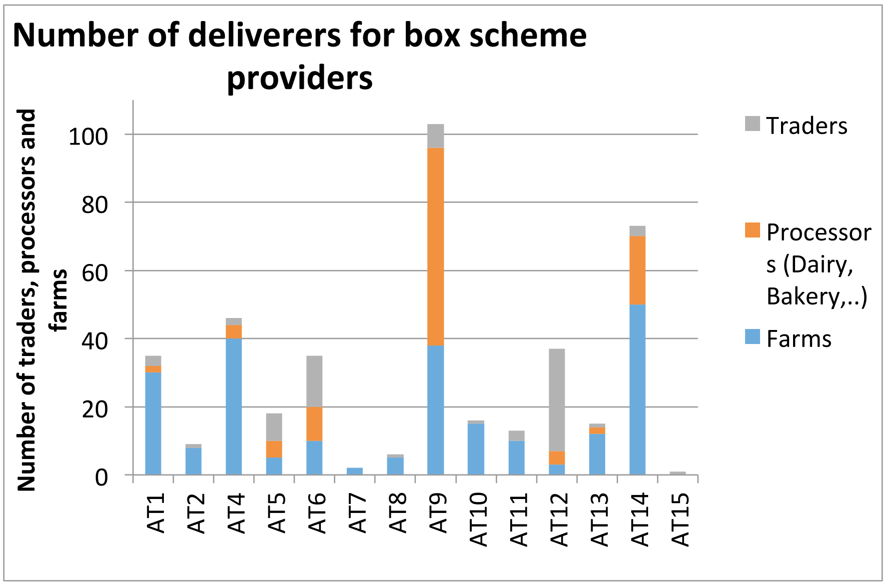


Figure 5: Number of supplying farms, processors and traders for products in the boxes of respondents (n=14)

Customer relations and ordering processes

Any business benefits from good customer relations and customer services. Both refer to the way a business communicates and interacts with people to gain and retain customers. Therefore, it's necessary and important for every business - independent from its size and line of business to cultivate a good relationship between them and their customers to attract them and keep a loyal base of customers (DAS NARAYANDAS, 2005).

This is also applicable to box scheme systems as they should build a short and local food chain that connects farmers/producers and customers. Therefore, communication, transparency and a good relationship between the mentioned groups are highly important these days but also in the future so that their future orientation and strategies rely strongly on it (FURTSCHEGGER and SCHERMER, 2015). This is not only a result of some literature research but also of our survey: the average of the interviewed box schemes rated "personal contact" as highly important. Some of them even hold regularly workshops, offer the possibility to visit their farm/company. Through these options and other measures such as providing further information in the box about the products, producers etc. they want to promote the relationship between them and their clients and offer a high degree of transparency.

The internet is the main and most important mean of communication to order a box: about 75 % of all orders are done online (via web shop/internet or e-mail) and less than 10 % personally.

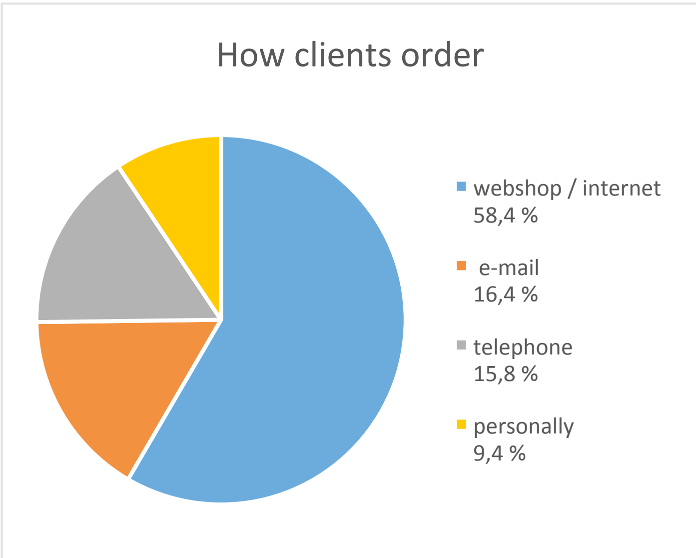


Figure 6: Way how clients of the interviewed box schemes order.

All the interviewed box schemes offer the possibility of home delivery while only 5 box schemes offer to pick up the box at their farm/company and 3 to pick up at pick-up spots.

There is a wide range how to communicate and how to strengthen the relationship between producer and consumers. Due to the fact that the means of communication are increasing, most of us think that communication as whole gets easier and quicker what might be partially true, but the increasing distance between the communicating people might be problematic (NIGGLI et al., 2015). That's probably the reason why many interviewed box schemes pay much attention on it and plan to do so also in the future.

Visions, values and future outlook

Austria, one of the World Champions in organic farming can look back on a long and successful history of organic farming what assumes of course an ecological awareness of clients who are willing to preserve a healthy environment and don't mind to pay higher prices for organic products. All these mentioned facts and the ever-expanding trend towards regionality, organic is perceived to be increasing and with it the trend of box schemes. The results of our research also indicate this as 13 of the 15 participants answered the question if they would like to increase their number of sold boxes per week in the future in the affirmative. The reasons why they would like to do so differ but many of them are correlated to a positive future of organic farming.

The two interviewed box schemes in our study that don't want to increase the number of sold boxes per week argued that they would like to do so because their capacities are already fully stretched and their focus is and remains to be on quality instead of quantity. This correlates with FURTSCHEGGER and SCHERMER (2015), presenting the case of a box scheme that pays much attention on a perfect customer service as well as on a close production cycle on their own and the supplying farmers what is in line with the origin idea of organic farming and its principles. KUMMER et al. (2015) analysed how growth influences (local) food systems by reference of a local organic box scheme in Austria. The (major) problems and challenges of the organic sector in Europe they mention correlate to the growth of organic farming too. A way to manage growth in accordance with the principles of organic farming as a box scheme might be strengthening cooperation with and within local famers and importers (KUMMER et al. 2015).

Case studies

Biohof Achleitner

Biohof Achleitner is one of the biggest box scheme producers in Austria with additional downstream business branches wholesale, restaurant and organic shop. Our interview partner at Biohof Achleitner was the head of marketing.

Developing the idea of a box scheme for Upper Austria
Since they inherited the formerly 20 ha farm Günter's parents, the couple had always been oriented towards direct marketing (small farm shop and supplementation of restaurants and caterers) and had collaborated with a local dairy, bakery and butcher and several fruits and vegetable farmers to sell their produce. In 1990 Biohof Achleitner had fully converted to organic. Ilse Achleitner, developed the idea of a box scheme based on inspiration of a customer who told her about the demand of his patients for easily accessible fresh, local organic vegetables and fruits. Biohof Achleitner then started delivery of boxes to households in 1998 one year after becoming a "limited liability trading company" that imported product s from Italy (later also from Greece).

Overview of historical cornerstones of Biohof Achleitner
Today the land of Biohof Achleitner comprises 100 ha and a modern building according to high environmental requirements for sales, packaging, restaurant etc. which is separated from production sites. The wholesale business branch of Biohof Achleitner is very important and since 2010 partly outsourced into a cooperation with BIOGAST (organic wholesaler for organic shops). All vegetables and fruits of BIOGAST are being provided by Biohof Achleitner while BIOGAST complements the product range of the Biohof Achleitner.

The box system is the most important business for Biohof Achleitner who delivers 7000 to 8000 boxes per week with 14 vans within the region of upper Austria and (by an outsourced logistic company) to adjacent areas of Styria, Salzburg and Lower-Austria.

They now also have their own restaurant (‚Kulinarium') and a retailing shop ('Frischmarkt') where they sell their own products but also articles from their partners. Additionally, they started to partly supply the three major supermarket chains in Austria with selected products, but this business is said to be shut down completely in 2016.

In the beginnings of Biohof Achleitner on some seasonal workers were hired, whereas by the year 2008 about 120 people were employed. This rapid growth lead to a structural crisis in which Biohof Achleitner overcame and now again employs around 120 people in the trading company plus about 40 to 45 seasonal workers on their own agricultural production site.

Vision and values
In producing and trading organic products Ilse and Günther Achleitner (and in the meantime also their children) emphasize to follow a deep conviction for organic farming as the only way to guarantee healthy soil for future generations. Concerning social work and involvement in social projects our interview partner mentioned support of employees such as personal training, further education possibilities or free to discounted products. Furthermore, Biohof Achleitner supports social organizations in their vicinity with second quality products, which are good to eat, but not fit for sale.

Customer relations
Biohof Achleitner launched a customer service and organizes a one big festivity every two years at the farm to which all customers are invited. We were also given information on a customer survey of 2015 which revealed 50% of box scheme customers are single households and 70% of all customers are between 25 and 65 years old, which is a wide range of age. Although no "typical customer" exists Biohof Achleitner focusses on a female target group as 92% of their customers are women.

Growth process and resulting challenges
Biohof Achleitner developed very fast and after about ten years the family run business experienced a weak internal organisation together with the economic crisis in 2008 and faced an almost collapse. In 2005 their growth rate of box customers had been about 20% annually but decreased rapidly for the years following. By 2008 Ilse and Günther Achleitner could only save their company with the considerable help the private investor but subsequent re-organization lead to recovery. We were told that this almost collapse posed the greatest challenge in the development of Biohof Achleitner and for the success afterwards they are very thankful for their customers' loyalty.

The year 2014 was a very difficult one again but very likely due to an extensive internal, organizational project as in 2015 development was very pleasing again.

Future perspectives
Our interview partner mentioned the threat of the main food retail companies aiming to conquer the market with home delivery and competition among box providers of a region. Biohof Achleitner is among the organizers of a working group of southern German and Austrian organic box schemes for developing ideas and solutions for this new situation on the market.

The company itself aims to enlarge its distribution area, gaining a higher box customer density and providing customers with convenient features such as the new web-shop. Further, closing production cycles on their own and on the supplying farmers' agricultural production sites should guarantee independency.

The enterprise also wants to encourage more and more producers to exclusively deliver to Biohof Achleitner (also those outside Austria).

Biohof Adamah

Biohof Adamah is the biggest box scheme for Austria's capital Vienna and we could personally talk to the founder of the company, Gerhard Zoubek.

Beginning of organic production and organic boxes for Vienna
Immediately after inheriting the farm he is now working on in 1997 Gerhard Zoubek wanted to transform it to produce organically. In 2001 the box delivery of about 70 boxes per week was introduced for customers in and around Vienna. Their main reason was using direct marketing strategies, without being influenced and dictated by big companies the possibility to grow rarities and old varieties.

Furthermore, the family strives for encouraging consumers to get back to more responsibility and the feeling to like being responsible for their food, its origin, cultivation and ethical issues connected to agriculture. Gerhard Zoubek informed himself about box schemes in Germany (where the origins lie) and at Biohof Achleitner, with whom Biohof Adamah cooperates up to now.

Today, all four children of Gerhard Zoubek work in responsible positions of Biohof Adamah, which is already selling 6000 boxes per week.

Customers relations, transparency and values
Gerhard Zoubek highlighted the desire to stay available for customers' interests or propositions via farmers markets, local fairs, festivities each year on the farm, excursions and guided tours or the possibility to organize children's' birthdays at Biohof Adamah. Also when asked about his business visions he highlighted transparency as one main issue, as well as increased sensitivity for customer needs, education for responsible, sustainable consumer behavior. Busy city households with or without children, mainly self-cooking persons but also to students belong to the regular customer base of Adamah boxes. Biohof Adamah also participates in a social project named "WUK Bio Pflanzen" producing organic herbs, salads, flowers and potted plants with people who – according to Gerhard Zoubek - "wouldn't find an employment in an open labour market easily".

Growth and reputation of Biohof Adamah
According to Gerhard Zoubek growth of the farm and box scheme was very satisfying and fast due to satisfied customers, which is one the major goals. However, a lot of new structural implementations had to be made as the fast development in size and sales outran development of business management instruments. As the company's biggest success Gerhard Zoubek highlighted its national and international reputation for a well-functioning project and organic box scheme.

Future outlook
Future challenges according to Gerhard Zoubek will be developing consequent, professional and brave strategies and their implementation in the current economic structures. For this it will be essential to think in broad and multi-dimensional but also avoiding exploitation of employees, his own family, the environment and himself.

Conclusion

This survey showed that the development of organic agriculture in Austria and organic box schemes in particular is very promising. The number of organic box providers has profoundly increased since the beginnings almost 20 years ago and especially since 2010. This reveals strong demand of critical customers for organic, fresh and local products and as all respondents of the survey can report growing business with average sales increase of 33% per year this trend seems to continue. Naturally, with increased numbers of providers competition and inventiveness will be an issue, which was shortly discussed within the case studies. Up to now, two big box scheme deliverers exist in Austria whose sales by far outreach those of smaller ones. However, the range of products and their origins may be very diverse even if providers are small. 30% of the responding box schemes cooperate with 5 suppliers or less and do not receive goods from farther than 100 km distance to their farm, although these numbers may rise to 50 suppliers and 9 box schemes who receive products from farther than 500 km distance. This could indicate that several box schemes and their customers lay more emphasis on local, seasonal products than others who might focus on organic produce but not necessarily on close origins.

One approach that box schemes in Austria have in common is transparency and close customer relations even though the internet and mail services are the main instruments to order products. Especially in personal interviews the great value of direct marketing as opportunity to inform, teach and assure customers about food quality and cultivation methods could be observed.

All in all, box scheme systems show to be promising for farmers to ensure that their work and quality of products can receive financial and personal appreciation. The market in Austria is steadily growing and today’s box schemes are able to supply customers with wide ranges of products and their majority still aims to expand.

References

MINISTERIUM FÜR EIN LEBENSWERTES ÖSTERREICH (2014): Grüne Bericht 2014. http://gruenerbericht.at/cm4/jdownload/send/2-gr-bericht-terreich/1523-gb2015-pdf

DAS NARAYANDAS (2005): Building Loyalty in Business Markets. http://mfnco.com/e-library/books/Building%20Loyalty%20In%20Business%20Market.pdf.

FREYER, B. et al. (2001): Der biologische Landbau in Österreich – Entwicklungen und Perspektiven. Agrarwirtschaft, 50, 7, S. 400-409.

FURTSCHEGGER, C., and SCHERMER M. (2015): Full case study report: Biohof Achleitner - Austria. University of Innsbruck. http://orgprints.org/29235/13/29235.pdf.

KILCHER et al. (2011): The Organic Market in Europe. Overview and Market Access Information for Producers and International Trading Companies. Fourteen Country Examples in the European Free Trade Association and the European Union, with a Special Focus on Switzerland. FiBL and Sippo, Frick and Zürich.

KUMMER S., HIRNER, P., MILESTAD, R. (2015): How growth of a local organic box scheme influenced supplying farmers. http://www.acta.fapz.uniag.sk/journal/index.php/on_line/article/view/219.

MINISTERIUM FÜR EIN LEBENSWERTES ÖSTERREICH (2015): Grüne Bericht 2015. http://gruenerbericht.at/cm4/jdownload/send/2-gr-bericht-terreich/1523-gb2015-pdf.

NIGGLI, U. et al. (2015): Mit Bio zu einer modernen nachhaltigen Landwirtschaft. Ein Diskussionsbeitrag zum Öko- oder Biolandbau 3.0. http://orgprints.org/29797/1/niggli-etal-2015-Bio-DreiNull-diskussionspapier-entwurf2.pdf.

WILLER, H., LERNOUD, J., FIBL, IFOAM (2015): The World of Organic Agriculture. Statistics and Emerging Trends 2015. https://shop.fibl.org/fileadmin/documents/shop/1663-organic-world-2015.pdf.

ORGANIC BOX SCHEMES IN WESTERN EUROPE

BELGIUM – FRANCE – UK

PARIS Paola, PERRIN Augustine, ZEMSKY Clara

CONTENT

Methods and data processing

Selection of the countries

As our team members are French and Belgian, we wanted to work on Western/Central Europe. In the beginning, we selected France, Belgium, the UK, Switzerland and Germany. We decided to take Germany and Switzerland out of our study because none of the box schemes we contacted in these two countries answered our survey. Moreover, it was the easiest option for us considering our languages skills and it also geographically made sense.

So, in the end, we examined box schemes from France, the United Kingdom, where we obtained answers from England and Scotland and Belgium, restricted to Wallonia.

How we found box schemes' addresses

In France we have only focused on AMAP (Association pour le Maintien d'une Agriculture Paysanne) and in Belgium mainly on GASAP[1] (Groupe d'Achat Solidaire de l'Agriculture Paysanne). AMAP represents a great part of French box schemes. They have a national organization so their contacts were easier to find. Indeed, there is an online directory where you can find the contact of all the AMAP, region by region.

We did similarly with Belgium, finding contacts on the GASAP website. However, there are much less GASAP than AMAP, principally because Belgium is a much smaller country than France and because the GASAP are limited to the Brussels region. Thus, in order to have a representative number of contacts, we also looked for Belgian box schemes that are not part of the GASAP system by searching on Google.

For the UK, we found a website (http://vegbox-recipes.co.uk/) with the name and sometimes the link to the websites of many British box schemes. We found most of the box schemes we contacted on this website but as it wasn't completely up-to-date, some additional Google research was also necessary.

Response rates

In the table below (table 5), you can see the number of box schemes we contacted and the response rate we reached for each country. After the first the first wave of answers, in order to improve the response rate, we sent some reminders to the box schemes that didn't answer. We also looked for some additional contacts for the countries where the response rate was the lower. In the end, the global response rate is from 11%, which we consider normal for this type of survey, where you contact unknown people.

Table 5: Response rates

Country	France	Belgium	UK	Total
Number of box schemes contacted	192	21	147	360
Response rate (%)	8.85	23.81	12.24	11.11

[1] AMAP and GASAP are two food delivery systems respectively in France and Belgium. Those systems have particular rules and are managed on precise ways regarding organic farming values. These principles and those functioning will be explained in the following pages.

To process the data we collected with the survey, we used Microsoft Excel, after having exported the data from Lime Survey.

Qualitative data collecting and context information

In order to collect some qualitative data, we have sent an email to all the people who answered “yes” to the last question of our survey, which was “Would you agree to be contacted for a Skype-interview about other aspects of your box scheme?”. Afterwards, we planned an interview with the ones who replied. In total, we did three interviews with people working in box schemes:

- Joel Margot, from the AMAP “Les paniers de Versonnex” at Versonnex in France near the border with Switzerland;
- Gianni Giuliani, from the “AMAP Champs libres” at Fontenay sous bois in France, near Paris;
- A member of a British CSA

We also contacted some “experts” to collect some context information:

- Hervé Le Meur, one of the responsible for the national directory of AMAP, with whom we did an email interview;
- Emilie Hauzeur, coordinator of the GASAP network, with whom we communicated via skype and email.
- David Petit, employee of the Réseau de Consommateurs Responsables (RCR) provided us with quantitative information on the GAC in Wallonia. The RCR is a non-profit organization which promotes local initiatives in the region.

To find some context information, we also used literature and several websites (as for example the GASAP and the AMAP websites).

Context

General

There are major differences regarding the importance of the agricultural sector in the three selected countries in general: in France, the agricultural sector accounts for 5.6% (1.42 million) of French workers (including agriculture, fisheries, and agrifood business). France holds a major place in agricultural production in the EU, accounting for 18.1%. In Belgium, around 2% of overall employment is in the agricultural sector, with 60% of the country’s land occupied by agriculture. Finally, the agricultural sector is responsible for 1.43% of employment in the UK. Despite the differences between Belgium, France and the UK, the local food movement has been growing in all three of these countries. Box schemes are an increasingly popular alternative to large supermarkets, encouraging shorter supply chains. Their success possibly comes from the diversity of possibilities they offer, from a CSA-type involvement to an occasional order via an intermediate (Dufour et al., 2010).

Models

Aside from more traditional business-like structures, the box schemes from our survey were mainly from three main models: CSA, AMAP and GASAP. This paragraph explains the main characteristics of these different models.

In the UK, some of the alternative food delivery systems are part of **CSA** (Community Supported Agriculture). The United States Department of Agriculture (USDA) defines it as “ a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community’s farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Members or shareholders of the farm or garden pledge in advance to cover the anticipated costs of the farm operation and farmer’s salary. In return, they receive shares in the farm’s bounty throughout the growing season, as well as satisfaction gained from reconnecting to the land. Members also share in risks, including poor harvest due to unfavorable weather or pests.” (Adam, 2006). All the French box schemes we investigated are part of the **AMAP** (Association pour le maintien d'une agriculture paysanne) system, which can be translated by “Association for the preservation of Peasant Agriculture”. The AMAP system, inspired by American CSA, was created in 2001. A group of consumers and one or several farmers form one AMAP. Consumers and farmers form the board of the association. The functioning of the association is only based on volunteering. As farmers have a lot of work, it is usually consumers that take care of most of the things (orders, distribution, communication etc). In Belgium a lot of box schemes in the Brussels area are **GASAP** (Groupe d’achat solidaires de l’agriculture paysanne) and also promote local and organic farming. Each GASAP is constituted of a group of citizens,which directly works with one or several producers. The aim is to buy on the long term and regularly regional food (fruits, vegetables, meat etc.) of good quality. It’s quite closed to the AMAP functioning. This concept extended to some “super-GASAP” which are bigger GASAP (at least 40 families) and which offers a larger diversity of products (website: gasap.be). The GASAP are supported by the GASAP network, which in turn receives 1% of their turnover.

Models framed by rules

For those three models, engagement is a strong value. In AMAP, consumers are called “consum'actors”. This concept, not only important for AMAP but also for GASAP and CSA, expresses the fact that consumers are not only consuming the products but they are also actors in the process of production. Indeed, consumers commit themselves economically, ethically and socially. Economic engagement takes place through ordering and paying the boxes in advance by paying a yearly installment. This way, the producer is sure of selling his production on a weekly basis. The economic engagement also involves fixing a fair price for the products sold, taking into account fluctuations and hazards linked to the agricultural activity of the farmers. Our survey showed that the majority of AMAP have a pick up point where customers can take their boxes. However, AMAP that are composed of only one farm also do on-farm-picking-up. AMAP respondents to our survey did not offer home delivery of the boxes.

The social engagement means getting involved in the life of the AMAP by helping with distribution, animation, and communication but also with cultivation. Indeed, customers have to go and work on the farm for half a day per semester (source: a representative of AMAP association). Finally, the ethic engagement mostly implies ensuring the sustainability of the AMAP. In exchange for the customer's engagements, farmers produce quality food and have agricultural practices, which respect the environment. However, most AMAP are certified or non-certified organic respecting organic farming principles. The basic rules of the AMAP system and the engagements mentioned previously are described in the AMAP charter (see annex 2), which was written in 2003 and then revised in 2014. This charter only defines the framework; it does not give indication on how to rule the association.

The UK CSA charter of 2013 (see annex 3) explains the principles and values of CSAs in the UK. This document does not give strict rules (each CSA has freedom for its own management) but can be used to understand what a CSA is and how to create a new one, in accordance with the values they promote.

The GASAP system, like CSAs or AMAP also follows a charter of principles and rules. This chart promotes social equity and improvement (adequate pay, reasonable working conditions, development of partnerships between producers), environmental awareness and respect (promotion of indigenous resources, limitation of energy consumption, no synthetic fertilizers and pesticides) and economic opportunities (democratic prices, limit dependence of external institutions). This aims to increase sustainable production without obligating farmers to adopt the organic certification in order to be recognized. The GASAP network follow the producers to make sure they follow the rules set by the charter.

Survey results

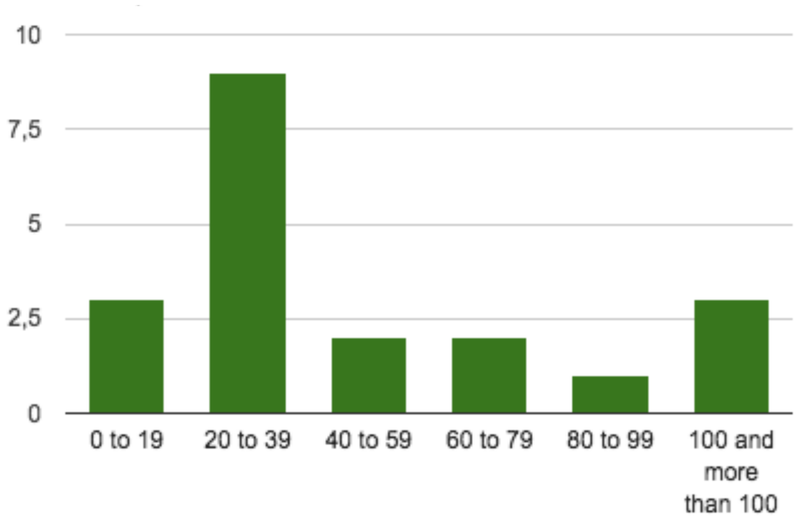
Box schemes size and type

British box schemes seem to be the first ones to have been created among the countries of our study area. Indeed, the first British box scheme of our sample started in 1994 and half of them (9 over 18 answers) started their activity before 2000 whereas all the Belgian and French box schemes appeared after 2000.

For France, we only contacted AMAP systems which means our results only correspond to CSA-like structures. For Belgium, our answers were from three CSA, which are part of the GASAP system, one company and a non-profit social organization. Therefore, our results do not take into account all the box scheme structures currently existing in these two countries. For example, in Belgium, the GACs consist of a group of families (25 on average according to an employee of the RCR) who order products together from various producers on a weekly basis. AMAP, GASAP and GAC are all consumer-based projects.

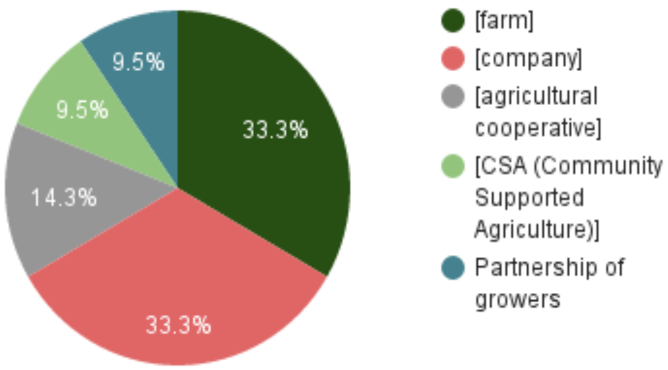
AMAP and GASAP are mostly small structures. 55% of the AMAP and GASAP which answered our survey sold between 20 and 59 boxes per week in 2015 and only 15% sold more than 100 boxes (see graph 1) Moreover, 63% distribute the products of 1 to 5 different farmers and only 10% distribute the products of more than 10. None of our AMAP and GASAP interviewees sell products from traders or trading companies and only 16% sell the products of 1 to 5 processors. AMAP and GASAP don't have the intention of becoming very big companies because of their local character and the fact that they work with a limited amount of producers and rely on volunteer work. 45% of the AMAP and GASAP that answered our survey don't want to increase the number of boxes they sell. They have reached the maximum number of boxes they can sell with the quantity of products that they get from the farmers. As AMAP and GASAP are non-profit associations, they don't make money. The only point of looking for new farmers to increase the volume of sales would be to satisfy more consumers or to diversify the range of products that they offers. Therefore, it is most likely that the reason why the 55% of AMAP and GASAP want to increase the number of boxes they sell is that the farmers they are working with have extra production that they could sell via the AMAP.

The Belgian company that answered our survey is much bigger: they sold 300 boxes per week in 2015 with products coming from 12 different producers, 3 processors and 1 trading company. The Belgian non-profit social organization has a medium size, selling 125 boxes per week in 2015, with products coming from 4 different producers and 1 trading company.

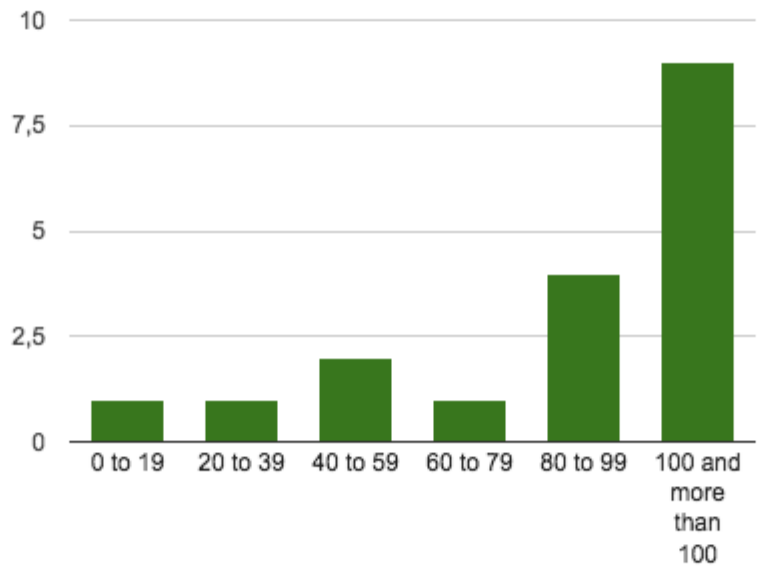


Graph 1: Number of boxes sold on average per week in 2015 (GASAP and AMAP)

The organizational types of UK box schemes are more diverse: farms, companies, CSA, co-operatives and also partnership or growers (see pie chart 1). Compared to AMAP and GASAP, most of the British box schemes are big structures, with 72% of them selling more than 80 boxes per week in 2015 (see pie chart 1). However, they don't sell the products of many different producers, 61% of them only work with 1 to 5 producers and the other 39% work with 6 to 10 producers. Thus, we can assume that the producers they sell the products from have bigger farms than AMAP and GASAP producers. British box schemes are more inclined to work with processors and trading companies. Half of our British interviewees sell products from processors (e.g. bakeries, dairies) and 67% of them sell the products of traders and trading companies. British box schemes are more willing to expand, 83% of them answered that they would like to further increase the number of boxes they sell.



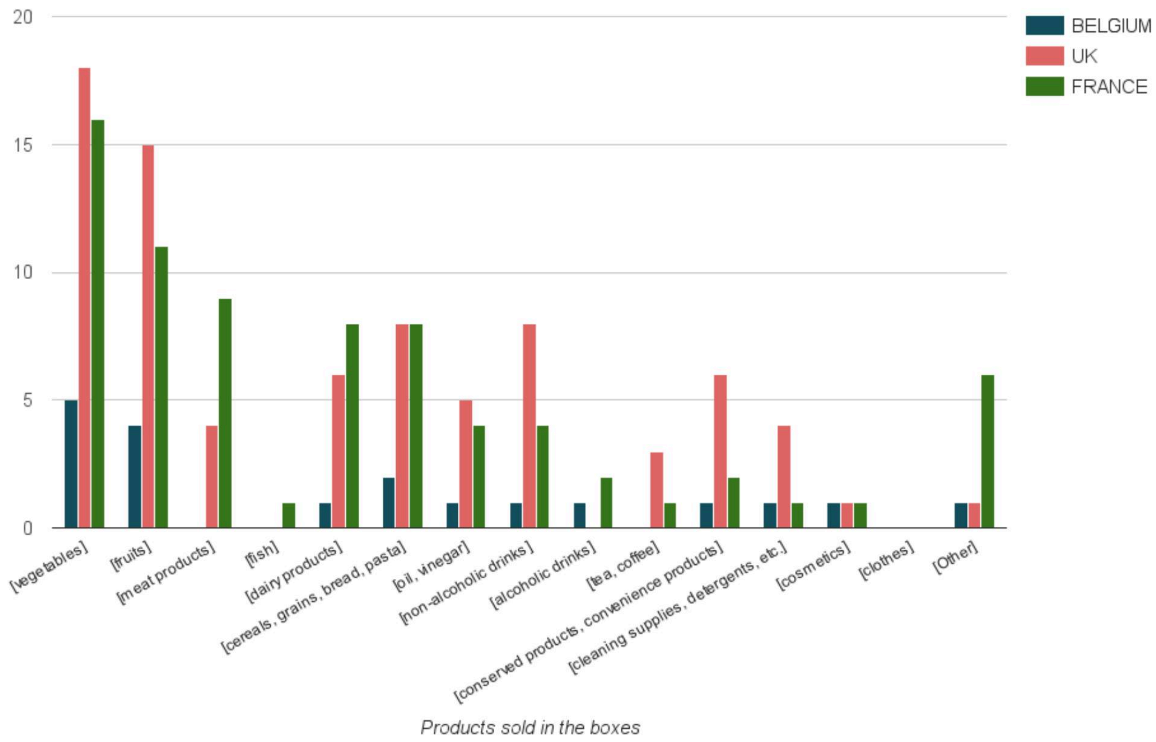
Pie Chart 1: Organization type of box schemes in the UK



Graph 2: Number of boxes sold on average in 2015 (UK)

Products and sales

The year of creation influences the evolution of sales. Indeed, for most of our cases, the older the system is, the bigger it is in terms of number of boxes sold. Regarding the products sold, we can extract similarities between the different countries. Fruits and vegetables are flagship products. The majority of our interviewees sell vegetables (all of the British and Belgian box schemes, 16/17 for the French ones). Most of them also sell fruits (see graph 3).



Graph 3: Products sold in the boxes in Belgium, the UK and France

Most of the products sold (in accordance with the charters of CSA, AMAP and GASAP) are produced in a way respecting the values of organic farming. Even if organic farming is not mandatory to be an AMAP, they have a strong link with it mostly because they were inspired by the organic certification (website reseau-amap.org). In our survey, on average 82% of the products sold in the AMAP boxes are certified organic and the rest of them are non-certified organic but not conventional. We found similar results for Belgium: there are no conventional products in the boxes. On the contrary we can note that 13% of our box schemes sold conventional products (although sometimes not exclusively).

In terms of "regionality" all the interviewees are not all on the same page. The Belgian systems seems to be the most strict on this point, on average, a product is considered regional if it comes from less than 56 km (radius around the selling point). For France and UK, this distance is greater (around 67.5 km). This may result from the fact that Belgium is a smaller country.

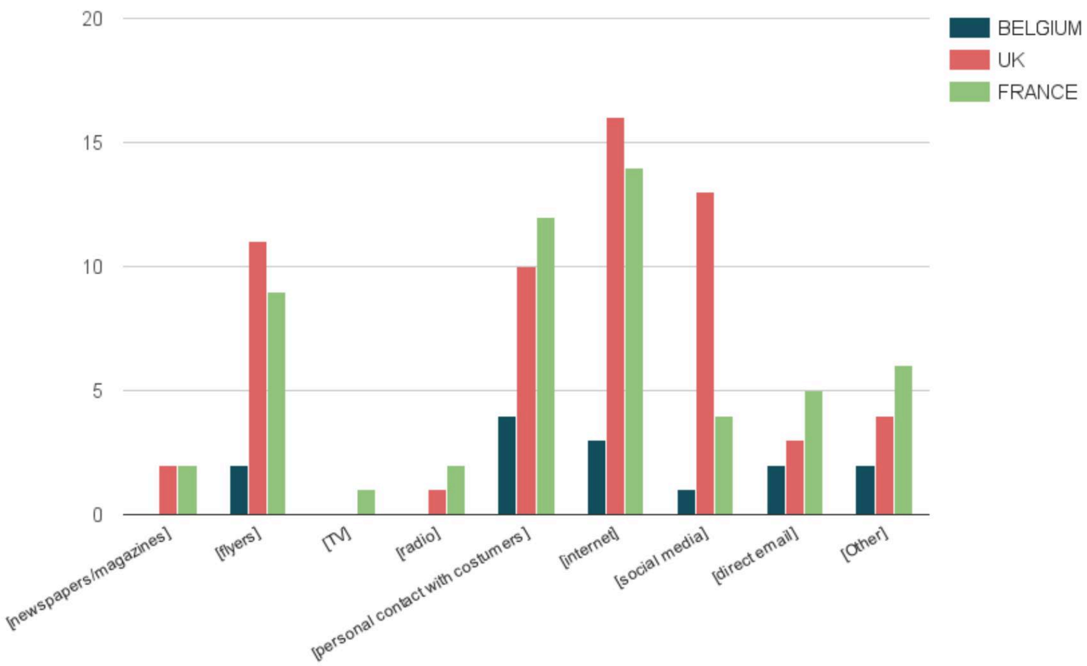
Important values

Concerning important values, few differences can be seen between the three countries. Organic production, personal interaction between farmers and consumers, local production, quality production, supporting small-scale farms, reduction of transport, reducing CO_2-emissions, fair wages, transparency and sustainability are values that all appear to be important for Western European box schemes. Traditional agriculture, supporting social projects, profitability and community building seem to be slightly less important. Artisan production is important for Belgian and French box schemes but less important for British ones. Finally, transfer of knowledge appears to be less important for French AMAP.

Communication

As we said in the previous paragraph, transparency is an important value for British, Belgian and French box schemes. The first step for achieving transparency is communication. This communication takes place mostly by email. Some also have digital newsletters, open days, leaflets in the boxes (more popular in the UK), printed newsletter (more popular in the UK) and even telephone communication. Communication with producers is mostly by e-mail or face to face (in meetings or just between two persons). Direct communication between consumers and farmers is also important. It reinforces the link between these two groups. In France and Belgium customers always have the opportunity to meet and discuss with the producers. In the UK only half of the box schemes offer this possibility.

To increase their number of customers all the interviewed box schemes confirmed they they advertise, but in different ways (see graph 4). As it's shown on the graph, Internet stays the privileged way of advertising (websites and social media) and is used by almost all the interviewees.



Graph 4: Means used for advertising in Belgium, the UK and France

Interview results

Potential for increasing the consumption of organic products

The potential of box schemes to promote the spread of organic agriculture depends on how we define organic produce. Amongst the box schemes who answered our survey, an average of 61% of produce is certified organic. Although this is already a majority, if we consider certified and non-certified organic products, we reach a total of 87%. This means many producers acknowledge the need for a sustainable production but don't go through the process of certification. Skype interviewees have expressed dissatisfaction from growing organic produce because it represents extra costs and workload such as keeping records, applying for permission to use slug pellets, etc. The British CSA owner said that to her, the proximity factor is more important than organic certification. The only reason for her certification is that land was previously certified organic and she has a trained organic producer. If this were not the case she would still produce organically without acquiring certification. One employee from the "Réseau des GASAP", a network which aims to help launch and coordinate GASAP, informed us that they were looking to develop a participatory guarantee system (PGS) to ensure product quality and promote exchange between producers. If the box scheme movement aims to include an increasing number of small producers, this would be a way to ensure that the produce is organic while adapting to farmer conditions.

The variety of box scheme structures can help promote organic farming in the country because of the different implication levels of the consumer. Emilie Hauzeur explained that GASAP have the highest participation need because they are self-managed systems, whereas other business-like structures require virtually no involvement from the buyer. Furthermore, there is certain flexibility when the consumers manage the box schemes. She reported that it is not uncommon to observe GAC becoming GASAP once a relationship is built with the producer(s) and that certain GASAP transition to GAC because it becomes too time consuming for participants.

Expansion of box scheme systems

From our contact with GASAP and GAC experts, it seems that organic box schemes have dramatically increased in recent years in Wallonia, Belgium. For instance, GAC exist throughout Wallonia and David Petit revealed that their number has escalated from 40 in 2000 to 155 this year. Table 6 shows the evolution of GASAP, the number of boxes sold and number of participants over the past ten years. This movement has continuously increased since its creation.

According to Hervé Le Meur, the AMAP system still has a big growth potential, especially in urban areas. Several AMAP reported that they are still growing: Joel Margot, from the AMAP "Les paniers de Versonnex", estimate that he gets a new client every 5 or 6 weeks, thanks to word-of-mouth and flyers he distributes in the town hall of the city. In order to facilitate the management of AMAP systems (and other similar box schemes), and to make it more accessible to people with less time to spare, a member of an AMAP in Bordeaux developed a software, called Cagette.net, in which you can handle the list of customers and farmers, orders, distribution, etc. Similar innovations increase the success of such box schemes. Despite this progress, the AMAP system implies involvement from the customer and may not be adapted to everyone.

Table 6: GASAP evolution

Year	Number created GASAP	Number stopped GASAP	Total number of active GASAP	Number of “boxes” sold	Number of people taking part
2006	1	0	1	20	40
2007	5	0	6	120	240
2008	8	0	14	280	560
2009	13	0	27	540	1080
2010	11	0	38	760	1520
2011	12	0	50	1030	2060
2012	14	0	64	1310	2620
2013	16	1	79	1640	3280
2014	13	3	89	1840	3680
2015	3	6	85	1790	3580
2016	1	0			

Challenges, difficulties

Some AMAP have problems regarding their customers' involvement. Indeed, some customers consider AMAP as an alternative to supermarkets but this is not compatible with the values that AMAP sustain. AMAP is not only about providing quality products but also about supporting farmers, especially small-scale farms and building relationships with farmers through personal interactions. This issue was raised by Joel Margot during our interview. A similar issue was raised in the UK. For the systems relying on volunteering such as nonprofits or CSAs, it is sometimes hard to find enough people every week. Volunteer participation oscillates greatly from one week to another depending on availability of the members and on the weather.

Finding enough local producers can also be an issue. Indeed, AMAP have to refuse new customers each year because they don't have enough products. As Joel Margot explained to us, it is difficult to settle as a small farm (1 or 2 hectares) in some areas, because of the high cost of lands. This is especially true in rural areas located peripherally to big towns. Paradoxically, the problem is reversed in the Brussels region where the 85 GASAP are located. An increasing number of producers is contacting the network to take part in a GASAP but the number of customers is not sufficient. In the UK, adapting to the increasing number of willing consumers will also be a constraint. One challenge for the future was reported to be the creation of new systems to satisfy this increasing demand.

As in any system involving human interaction, conflicts and misunderstandings can affect the proper functioning of AMAP. The willingness of farmers to adapt their production to the expectations of customers can also affect the AMAP positively or negatively. Indeed, as you can't choose the products you get in the boxes, customers are particularly sensitive to the adaptability of farmers to their feedback.

A skype interview with a British CSA owner raised the issue of owning land. Many producers rent their land from bigger landowners, making them vulnerable and their future activity uncertain. Gianni, a French AMAP participant explained that in France this problem can be limited thanks to an association called “Terre des Liens” which helps producers acquire and keep their land, through support and financial aid.

Discussion

Incentives for producers and consumers

Producers and customers decide the prices of the AMAP vegetable boxes together, between 6.5 and 15 euros per week in a study conducted by Mundler (2013). However, despite the fixed price of the boxes, the content and quantities can vary throughout the year; trust being a major aspect of this exchange. The study shows that prices in the AMAP system can be lower than those of the market, but producers still declare being satisfied by the system because the assurance of selling their whole production, saved time and limited waste are all benefits they receive from the AMAP. Most of the consumers mentioned supporting the producer as a main reason for commitment, but also estimated that joining the AMAP allowed them to save money. This is corroborated by Gianni Giuliani, from the AMAP “Champs Libres”. He considered that the majority of his clients are left-wingers or ecologists. In order to reach a more diverse range of people, he has been conducting a study for three years in which he compared the prices of vegetables from the supermarket and from his AMAP boxes. The conclusion of his study is that the products of the AMAP were between 10% and 30% cheaper than the organic products of supermarkets. Mundler’s study states that in 63% of cases, the prices of boxes were inferior to the prices in other supply chains. Therefore, the difficulty of opening AMAP systems to a wider public can be explained by sociological or awareness reasons rather than financial ones. There is a great potential for the creation of AMAP in more disadvantaged areas; collaboration opportunities exist with social services, education regarding food, etc. (Mundler, 2013).

Social benefits of box schemes not only include the contact between producer and consumer, but also amongst consumers or amongst producers. Dufour et al (2010) report that many older AMAP or box schemes help newer organizations launch by giving them advice. This can avoid repeated mistakes and obstacles. When asked about competition between CSAs, a British CSA owner said she didn’t feel threatened by new CSAs or box schemes, but rather that she was willing to help them settle and develop a profitable business.

Box scheme customer base

In their empirical study of two towns, Brown et al., (2009) attempt to identify the “socio-demographic profile of consumers using commercial local box schemes in France and England; what motivates their participation in such a scheme and to identify barriers to making further sustainable food choices.” They identified differences in the English client base and the French customers, finding that the French customers were over 45 years old or retired, whereas the English customers were between 26 and 45. Gianni Giuliani estimated that in his AMAP, the average age of consumers is 40-50 years old but that their age ranges from 20 to 60-70 years old. He also believes that most consumers are part of small families of 2-3 people because they order half boxes every week. He also assumes the large success of the AMAP in the town is due to the fact that the local government is involved in “green” initiatives. Joel Margot confirmed this by stating that many clients are young families with parents wanting to provide quality food to their children.

Furthermore, Brown et al. (2009) found that in both the English and French towns, customers had a medium or high income. Their results are supported by Vermeir and Verbeke (2006) who stated that customers are more affluent and a higher percentage are professionals relative to their respective regions. Similarly, Mundler (2013) states that AMAP participants are not those with highest incomes, but do benefit from a medium income and high level of education. The British CSA owner said her client base was on majority constituted of 90% Caucasian British clients with middle to high income.

Our study aims to look at the potential of box schemes to spread organic and sustainable agricultural practices. In order to have an impact, box schemes need to be accessible, both financially and physically to a large proportion of the population. Identifying the most prominent client characteristics can also help target additional customers.

Expansion and Increase of Organic products

Our survey and interviews have provided us mostly with information concerning involvement-based box scheme structures, especially in Belgium and in France. There exist many other structures that rely less on consumer participation. For example, Le Campanier is an organic box scheme in the North of France in which people order on Internet and choose between several pick up points. “La ruche qui dit oui” (or “Food assembly” in English) is another European distribution system,which has grown tremendously in recent years. Consumers order locally grown products from a “hive” grouping various producers or processors via an Internet platform. Each hive has a person responsible for the whole process, and who in turn receives 8.35% of the benefits made. Another 8.35% go to the offices in Paris for managing the website and other activities, where there are now 100 workers.
(Website: laruchequiditoui.fr) This recent company was created in 2009 and now has 755 “hives” in France, 67 in the UK and 65 in Belgium. Although this company has been source of debate and opposition from AMAP and GASAP systems, it is similar in the sense that it is local (products must come from less than 250 km), allows producers to decide the price of their products and enable consumers to pick their products on a weekly basis which they can pick up at a pick up point. The opposition mainly comes from the fact that this system (like other box scheme systems) has transformed a system based on volunteering in order to make a profit.

Limits

There are not only advantages to box schemes. In a study, Dufour et al., (2010) interview 11 fruit and vegetable producers, only four of which depend solely on box schemes to market their produce. Selling produce for box schemes can imply the need for a larger diversity of vegetables, increased travelling towards consumers, which in turn increases working hours and necessary activities. The authors also mention that some producers no longer regard the social aspect of AMAP as a source of satisfaction, mainly due to the lack of implication from part of the consumers, which was mentioned earlier as a potential issue. The fact that consumers pay ahead of time in the AMAP system is both helpful and can be a constraint. Certain producers reported this as a source of stress, fearing that they would not be able to fill boxes, renew contracts. The pressure of owing money to the customer and being dependent can also be viewed as an inconvenience, even though it supports the producers in times of volatility of markets and climatic hazards.

Bibliography

Adam, Katherine L. Community Supported Agriculture. ATTRA-National Sustainable Agriculture Information Service, 2006.

UK CSA charter: Community Supported Agriculture Network UK Charter - Working Draft Summer 2013

Brown, E., Dury, S., & Holdsworth, M. (2009). Motivations of consumers that use local, organic fruit and vegetable box schemes in Central England and Southern France. *Appetite*, *53*(2), 183–188. http://doi.org/10.1016/j.appet.2009.06.006

Coley, D., Howard, M., & Winter, M. (2009). Local food, food miles and carbon emissions: A comparison of farm shop and mass distribution approaches. *Food Policy*, *34*(2), 150–155. http://doi.org/10.1016/j.foodpol.2008.11.001

Department for Environment, Food and Rural Affairs Department of Agriculture and Rural Development (Northern Ireland) Welsh Assembly, The Department for Rural Affairs and Heritage The Scottish Government, Rural and Environment Research and Analysis Direct. (n.d.).

Dufour, A., Catherine, H., Lanciano, E., Dufour, A., Catherine, H., Lanciano, E., & Pennec, L. (2010). L' herbe est-elle plus verte dans le panier ? Satisfaction au travail et intégration professionnelle de maraîchers qui commercialisent sous forme de paniers

France, Europe's leading agricultural power. (2014). Retrieved May 1, 2016, from http://www.diplomatie.gouv.fr/en/french-foreign-policy/economic-diplomacy-foreign-trade/facts-about-france/one-figure-one-fact/article/france-europe-s-leading

Mundler, P. (2013). Le prix des paniers est-il un frein à l'ouverture sociale des AMAP ? Une analyse des prix dans sept AMAP de la Région Rhône-Alpes. *Economie Rurale*, (n°336), 3–19.

Peeters, A. (2010). Country Pasture/Forage resource Profile for Belgium. Retrieved May 1, 2016, from http://www.fao.org/ag/agp/agpc/doc/counprof/belgium/belgium.htm

"Annuaire National Des AMAP." Accessed May 28, 2016. http://www.reseau-amap.org/.

"Association pour le maintien d'une agriculture paysanne." Wikipédia, May 27, 2016. https://fr.wikipedia.org/w/index.php?title=Association_pour_le_maintien_d%27une_agriculture_paysanne&oldid=126555000.

"Charte Des AMAP - Association Pour Le Maintien D'une Agriculture Paysanne," March 2014. http://miramap.org/IMG/pdf/charte_des_amap_mars_2014-2.pdf.

"Réseau Des GASAP Bruxellois : GASAP." Accessed June 7, 2016. http://www.gasap.be/.

BOX SCHEME SYSTEMS IN SOUTH EUROPE AND RUSSIA

Tatiana Demkina, Daniela Jelović and Sarah Lechthaler

CONTENT

Introduction

Nowadays the dominant industrial food system has a large distance between the production and the consumption place. Less consumers care about the process behind the delivered products. Consumers demand for organic products increased enormously over the last years. Esteemed as a production method more in harmony with environment and the local ecosystems as well because of social and economic benefits organic agriculture became a mainstream consumption choice (SEYFANG, 2008).

Alternative food networks (AFNs) have established trying to reconfigure the relationships between food, producers and consumers. Following the aim of a sustainable production and consumption with economic, social and environmental benefits, consumers play an active role in creating new food supply chains based up on alternative values to the mainstream (SEYFANG, 2008).

Local food consumption stays high in trend as well as the desire to return to authentic small scale production and a new sense of connection with the land. According to SEYFANG (2008) the principal environmental rationale for localising the foot supply chain is cutting the food miles in order to reduce carbon dioxide emissions from transport. Furthermore this alternative food networks contribute to rural regeneration and social embedding, ensure livelihood, community building and increase the connection to the land (Social and economic rationales).

Alternative food networks are likely to give producers more control over their market by stabilizing their incomes and reducing vulnerability. Further on the farmer gains the advantages of the direct contact to the consumer, social relations and the possibility of complaints and compliments.

To the growth of this alternative food networks the supermarkets have responded by establishing their own local produce ranges and increase the marketing of local organic products. Nevertheless a group of consumers prefer alternative food networks, because of their advantage of practicability, better accessibility, promotion, wide range of products, price pressure etc. (SEYFANG, 2008).

'Direct sell initiatives' similarly facilitates closer producer-consumer relations by selling direct to the consumer either by face to face or by spatially extended supply chains over the internet. This could be Farmers markets or Farm gate sales as good as Mobile food shops and box schemes (VENN et al., 2006).

Organic box schemes are important elements of food system, can allow to sustainable food consumption and for this reason have a future potential for food-system localisation and sustainability of agriculture (TORJUSEN et al. 2008).

Methods

The aim of this working group was to get an overview about box scheme systems in following countries: Russia, Italy, Croatia, Serbia and Slovenia. The team includes students who come from these countries or those ones who are able to speak the respective language. At the beginning the whole lecture group with help of supervisors evaluated a questionnaire. Afterwards the questionnaire was translated in native languages of each country. The first mailing was done after Easter break, link to survey was sent to 20-30 box schemes per each country; in fact, response rate was low, after two weeks reminding mails were sent, that helped to get 3 more answers, response rate of Croatia and Serbia (from 32 box schemes 7 completely surveys) is 22% that is higher than Italian one 17% (from 18 just 3) and Russia 7% (from 30 just 2). There were no answers from Slovenia. Some of respondents did not fulfil answers after clicking on the link, probably, the problem was caused because of big extensive and detailed formulation of questions or because of the mistrust. At the end we got 19 uncompleted answers and 14 fully completed.

Additionally to the survey, six semi structured interviews were done. Questionnaires have been developed in border of actual problems and topics of three countries Russia, Croatia and Italy. Slovenia was excluded as there was no answer in survey. Skype interviews were done in Russia and Croatia and personal one in Italy. In each of country 2 interview, one with expert and one with owner have been done, in some cases it is one person responsible for both positions.

Calculation of percentage per each country in the graphs in result have been done by delivering sum of values by number of box schemes (n=13).

General facts

RUSSIA

Briefly about box-schemes developing situation in Russia: there is no national certification standards, however there is GOST[2] standards, which are controlling production, procession, labelling and presence of GMO. A new law about organic production is going to be implemented in 2017. This is the main reason that in 2013 about 45 % of the producers would label their products as organic without being certified. Using idea of organic agriculture as perspective market such products would be sold with 50-300% of margin for retailers. This makes real organic producers more vulnerable (Pechkina, Egorov, 2012).

A big Problem in Russia is distrust of people in local certification systems and correctness of labelling. This attitude originates in the post-soviet period, when more than half the ingredients listed on packaging, was not true. According to market research conducted by AgriCapital, about 60 percent of customers in Moscow supermarkets are willing to pay more for products if their packaging contains a special "organic" sign. 45 percent of Russian manufacturers put on the label the words "ORGANIC," "natural" or "organic" without any certification. Suppliers set the price of these products by 20-35 percent higher (Ayala, 2011).

Russia is among the ten countries in the world with the highest increase of organic land from 2006 to 2014 +101'592 ha. It shows the potential of the market. Because of the low rate of

[2] GOST (Russian: ГОСТ) refers to a set of technical standards maintained by the Euro-Asian Council for Standardization, Metrology and Certification (EASC), a regional standards organization operating under the auspices of the Commonwealth of Independent States (CIS).

the belief in certification and labelling not much consumers are trusting to the domestic organic products. According to the Union of Organic Agriculture, the number of companies producing organic products did not exceed 100 at the beginning of 2015. The ecological products are much more often associated with the open-air markets, where producers and retailers are selling their products to the costumers.

According to official statistic from euro monitor bases there is no direct marketing sales of organic products in Russia, but in fact this form of sales is common for country. Trust in the quality of the products are based not on the papers but on the personal connections between salesman and customer and of course opportunity to taste almost everything personally. At the last years in the more urbanized areas it is possible to observe the tendency of the replacement of actual producers at the markets by retailers and their representatives.

As an example in 2010 Corporation "Organic" introduced to the Russian market the first organic dairy products "EtoLeto" ("ThisSummer") certified in accordance with European organic standards. The organic farm was certified by Swiss certification company bio.inspecta. Farm is located 180 km from Moscow and has web shop, and stores in Moscow. In fact, system as deliveries in boxes in Russia slowly developing, as customers prefer to buy in usual stores.

CROATIA

Concerning the area of agricultural land under organic production in Croatia form 2002 to 2010, a significant increase is noted. Total area under organic production in 2010 was 23,282.37 ha. in 2000 (PETLJAK, 2013). There were 17 producers of organic food on the area of 12.5 ha and they had a certificate issued by control bodies or authorities recognised for the purpose of equivalence. When analysing the number of organic food producers, the most reliable data are those published in the Official Gazzete (No. 12/01, 14/01, 79/07) in the List of legend and natural persons entered in the *Register of producers in organic production of agricultural products* and the Amendments of the *List of legal and natural persons entered in the Register* as well as the *List of legal and natural persons erased from Register* (PETLJAK, 2013).

In Croatia, there are following direct distribution channels of organic food: on-farm sales, door-to-door sales[3] (box schemes), farmers market, fairs and fair exhibitions, farm shops. According to Zanoli and Jukić (2005), in Croatia, a great number of farms are not capable of producing large quantities of organic food. Thus, the small quantities of organic food they produce are distributed through direct channels. Direct distribution increases the income as the trade margin money stays on the farm. According to Bošnjak (2007) the direct sales is the most important distribution channel for domestic producers, but it is also important for consumers because through direct contact with producers they develop trust and, at the same time, feedback is more efficacious. For domestic producers of organic food, direct sales are very often the simplest way of selling.

Farmers market are traditionally one of the most important ways of direct sales in Croatia, fresh fruit and vegetables in particular. Fairs are occasional sale events which are usually organised at the time when certain products are harvested.

[3] Door-to-door sales include on-line-sales, orders per telephone or fax and a permanent order: box-schemes (zelena košara).

Indirect distribution channels of organic food in Croatia are: wholesale and retail. Organic food retail includes supermarkets and hypermarkets, specialized health food and, as a recent type of retail in the Croatian market, organic supermarkets. When domestic producers sell organic food through intermediaries, it is usually done through wholesalers (PETLJAK, K., 2012).

Croatia has three CSA streams (GSR – grupe solidarne razmjene, SEG – solidarne eko grupe, RIS – Razmjena i solidarnost) which differ slightly in their modes of working but the overall definition says that solidarity groups are informal citizen groups that exchange products and services based on transparency, trust and solidarity (EUROPEAN CSA RESEARCH GROUP, 2016).

SERBIA

In Serbia organic farming and processing started to grow in the last five years making up 0,17% of total agricultural land and involving about 3,000 farmers in 2009 (KALENTIC et al., 2014).

Organic producers can be divided in two main general groups/types: the first one can afford to be independently certificated by control bodies, and the second group are farmers/ cooperates whose production is subjected to group certification, allowed according to the valid Law of Republic of Serbia. This group of cooperates is bound by the contract with some of the export companies that buy off the whole production and at the same time provide cooperates with support that includes: inputs, education, and certification costs, but certificate holder is the company, and not the producer (KALENTIC et al., 2014).

Small-scale farmers, especially not certified organic farmers, are faced of the giant agroindustry that has been taking over small farms and small business, they are avoiding of being taxed and fined by the government because of a lack of certification and working in alternative economy praxis, being afraid to be accused of taking part in the grey economy. These are the biggest issues that concern CSA or biodynamic or permaculture or alternative farmers/groups in Serbia (EUROPEAN CSA RESEARCH GROUP, 2016).

On the Serbian market most certified organic products are imported, and only some quantities of fresh and processed fruit, vegetables and cereals are of local origin (KALENTIC et al., 2014). Native name for box scheme is *'zelena eko korpa'*.

ITALY

In Italy 1.113,742ha area used as organic surface, nevertheless from 2007 number of organic producers has been decreased from 45.390 to 41.816 in 2011. Analysis of the data processed by SINAB[4] on imports of organic products from Non-EU countries shows a sharp increase for the years 2010-2011 in the total amount of imported products, mostly from Moldova, Kazakhstan, Nord America, by about 49% between 2009 and 2010 and 61% from 2010 to 2011, that was a reason of decrease of own organic producers (Abitabile et al., 2012). In the last years in South Tyrol the organic agriculture is increased, mostly in Grassland and fruit growing. At the moment there are more than 650 organic farmers in South Tyrol (Provinz.bz.it, 2016).

4 data- base, on the basis of lists submitted by authorised inspection bodies

According to Bio Bank[5], there were 1,2% specialized shops in Italy in 2011 (+4% compared to 2010). 65,3% from these shops are concentrated in the North, 22,3% in the Centre and 12,4% in the South (Abitabile et al., 2012).

Beside the important channel of specialist shops, many alternative forms of sale are on the rise. They still have a limited share of the market, but attract growing interest on the part of the consumer. These include direct sales (2.421), group purchasing organisations (GPOs) and organic markets (1.163). There is a steady increase, with annual growth rates higher for GPOs and direct selling than for farmers markets, which in 2011 also showed a slight decline in number (Abitabile et al., 2012).

Another channels of deliveries as organic school canteens (872), restaurants (246), farm stay sites (1.302) have also potential to be increased in recent years. The farm restaurants and canteens, which are working under the direct deliveries system, increased in 28% in 2011. In 2009-2010, regional organic agriculture maintained its position according to growth of domestic demand and the strong exposition of the short chain and direct sales of organic products (Abitabile et al., 2012).

The persence of various organic producer organisations have farmed cooperatives or agricultural societies for the primary product (washing, sorting, and packaging). This companies chose to make agreements or contrast with organised distribution with main condition of fruit, vegetables, dairy products and processed cereals supply (Abitabile et al., 2012).

New forms of logistics for organic production with short chains have also been implemented in the region following an initiative in 2007 by Prober[6], AIAB Emilia Romagna[7] and funded by MIPAAF[8] (Abitabile et al., 2012).

[5] Banca dati del bio

[6] Associazione Produttori Biologici e Biodinamici Emilia Romagna

[7] Associazione Italiana per l'Agricoltura Biologica

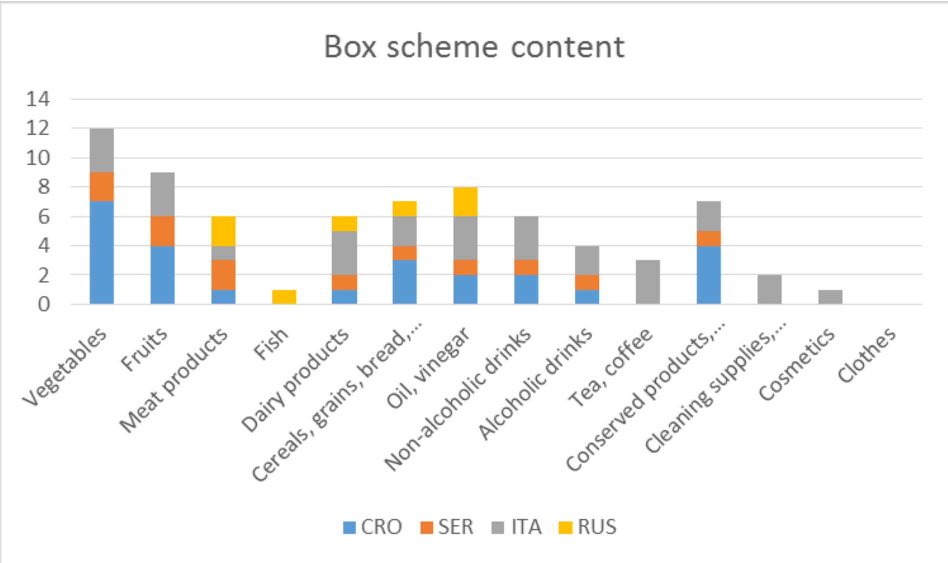
[8] Ministero delle politiche agricole alimentari e forestali

Results

Survey results

BOX SCHEMES CONTENT

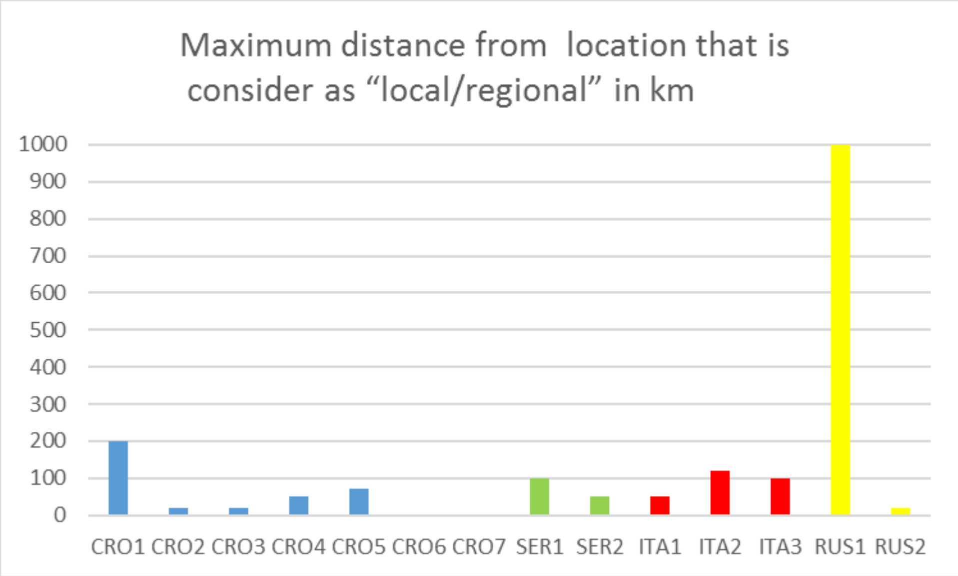
86% of box schemes contain vegetables in their boxes. The second most preferred product in the box is fruit with 64%, is followed by oil and vinegar (57%). Half of them contain cereals, grains, bread, pasta and conserved products. Meat products, dairy products and non-alcoholic drinks are included with 42%. Some box schemes also offer alcoholic drinks, tea, coffee and cleaning supplies. The lowest contain in the box schemes with only 14% are fish and cosmetics. None of them offers clothes (graph 1).



Graph 1: Box scheme content (n=14)

MAXIMAL DISTANCE

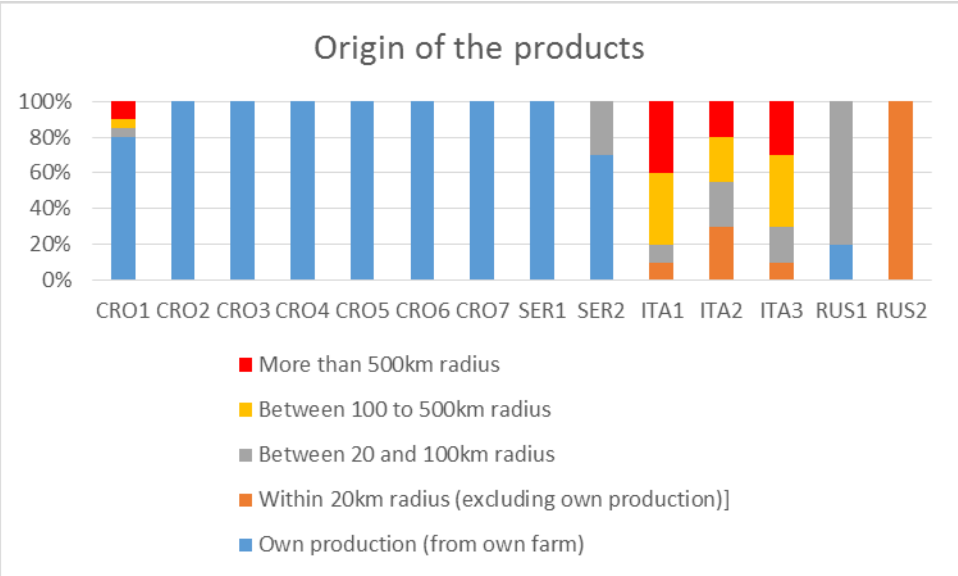
The graph no 2 describes the largest distance (in km) from the location that is considered as 'local/regional' by the survey respondents. Most box schemes defined local as distance between 20 and 100 km. In a case of russian box scheme, it could be concluded that the size of the county has an 'impact' on definition of local/regional. This conclusion is made by the fact that radius of 1000 km is defined as local in one russian box scheme. It could be difficult to trust enough in the meaning of local origin of product for consumers when the definition of local/regional is defined different mostly for each producer (50,100,200 and 1000 km).



Graph 2: Maximum distance from location that is concidered as 'local/regional' in km (n=14)

ORIGIN OF THE PRODUCT

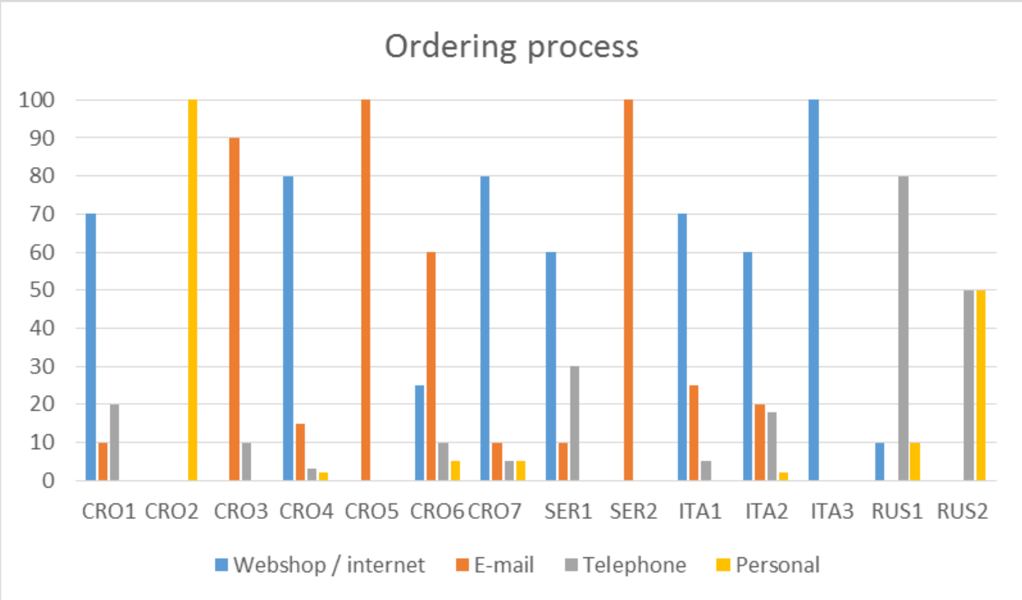
Suggesting that products inside boxes are local and regional are one of the most important values for consumers to buy box schemes. Knowing more about products origin as well can be as a competitive benefit of boxes, in fact, small booklets with description of producer and farm can be used. The graph 3 is showing that 50% of surveyed box schemes has only the products from its own farm (6 Croatian, 1 Serbian). In all surveyed box schemes from Italy and in one Russian box scheme the products do not come from own production. For 25% of box schemes their products come from more than 500 km radius.



Graph 3: Origin of products (n=14)

ORDERING PROCESS

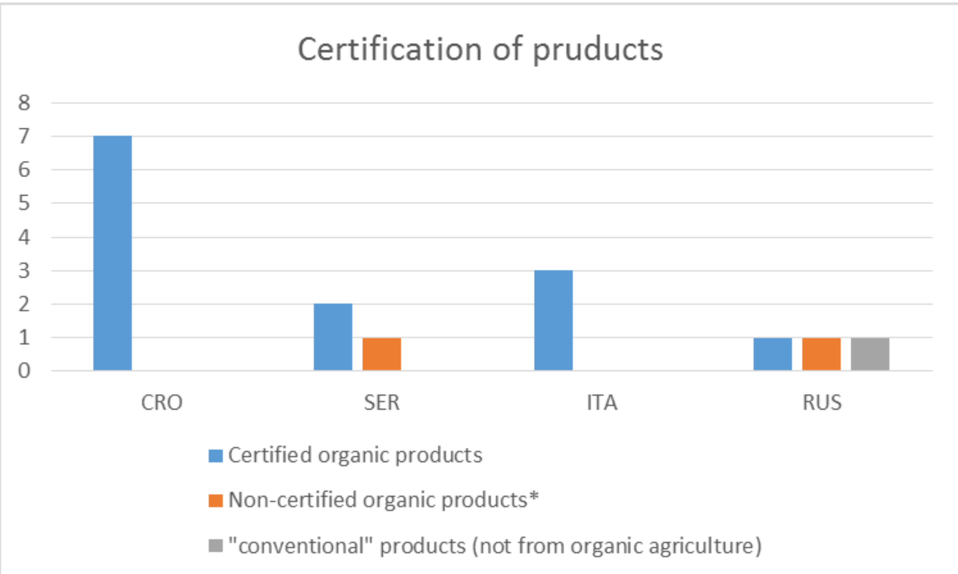
Orders are mainly done through internet, e-mail, telephone and in personal. 61,7% of box scheme consumers order their boxes by internet. For 43,5% of costumers e-mail is the most convenient way of ordering. Ordering by telephone is present with 23,05%. 24,9% of consumers is doing ordering in personal.



Graph 4: Ordering process (n=14)

CERTIFICATION OF PRODUCTS

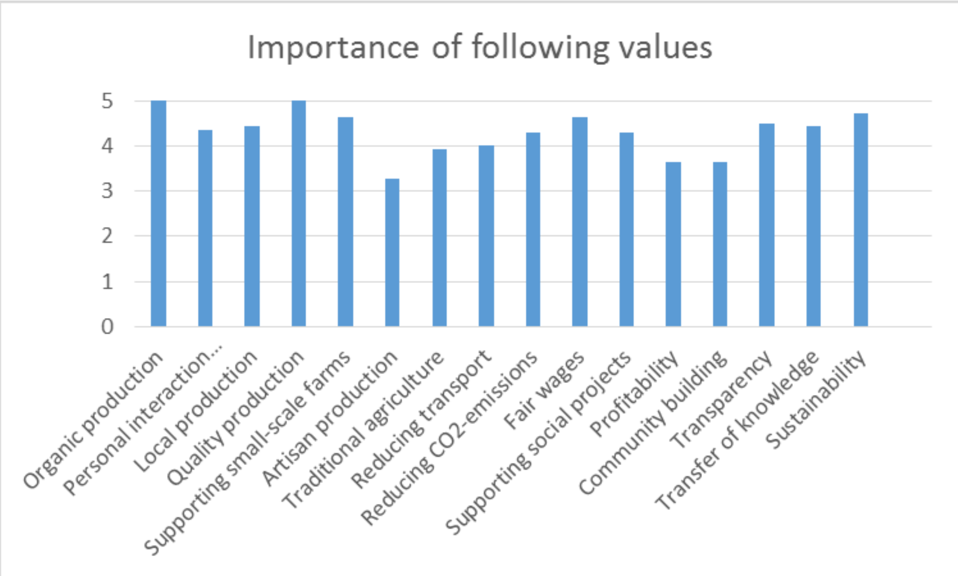
The surveyed box schemes from Italy and Croatia offer 100% certified organic products in their boxes. On the other hand, box schemes in Serbia and Russia also offer non-certified organic and conventional products (graph 5).



Graph 5: Certification of products

IMPORTANCE OF GOALS AND VALUES

Importance of goals and values of the surveyed box schemes is described in graph number 6. The goals that are marked with highest grade are organic and quality production. Also, personal interaction between farmer and consumers, local production, supporting small-scale farms, fair wages, transparency and sustainability were considered as very important. The less important for box schemes practice are artisan production and profitability as well as community building.



Graph 6: Importance of following values

Skype interview results

The questionnaire included the possibility to do a skype interview to get far better overview on the box scheme production. The following owners of box scheme systems were interviewed in personal or by skype:

RUSSIA

Both of the box schemes made a survey and interview. As alternative to personal interview, conversation by Skype and Vieber adds have been done. JSC «LENINSKOYE» situated in Tambov. It was founded in 1922, based on collective cooperative and named after Lenin. Before 1992 it was working according government requirements, it was reorganised in box scheme form in 1992 after USSR's collapse. Nowadays there are 64 workers, mostly local people, including the owner. The Interview was made with the owner, who is an expert and the main manage. Box scheme includes not- certified ecological and conventional production of fruit, cereals, meat and fish. The main problem of certification is deficiency of certification bodies in Russia and the high cost of certifications from European counties, as well as lack of demand on Eco-production and no support of such type of production from site of government. Nowadays box scheme deliveries 8000 boxes per year.

The first box scheme has own territories and stables, moreover, there is a forest, where wild animals grown up for venison, there are 3 lakes for carp, crucian and pike production. These special products are sold seasonally; fishes are sold mostly fresh on the local markets, and also sold in the boxes when people are asking for it. There is a big building used as a storage and packing station. There is no own slaughterhouse (abattoir), but there are several in Tambov region, nearby, that are used for package as well. Meat products are beef, poultry and pork. All products are not certified, but owners are trying to develop better conditions for animals and also to increase the quality meat by using better feed.

Second box scheme is a typical FAMILY PRODUCTS from Tambov region. The farm located close to central city Tambov, that allows producer reduce costs of transportation and delivery time. This box scheme is a bright example of the most spread farm form in Russia with small domestic production. Traditionally in cities people are used to do shopping in locals markets, but through the high competition with supermarkets, small stake holders switched into system of direct deliveries. Box scheme as a system forms base of permanent clients and reduce time for selling on markets during whole day. In fact, not to lose clients farmer fare trying to focus on quality of products. Content of boxes are relatively small: dairy products, eggs and poultry. The amount of boxes are more than 110 per year. As a small gift they are also adding some parsley or green onions to the boxes. Officially farm was registered in 2002, which allowed farmers to sell products on local markets. Permanently on farm 2 people are working, children are coming to help during weekends. The territory just 2 ha. Animals including 2 cows, which are grazing on pastures seasonally, chickens and ducks are in stables on territory of farm. Skype interview have been done with box schemes' owner and small stake holder, who is at the same time an expert from farm.

By analysing interview answers future box schemes development in Russia can be done.

The first box scheme is a relatively big one for Russia. The amount of products include cereals, apple, dairy products and different type's meat. The forms of sales are both as well as boxes and wholesale trade. All products are deliveries inside of county, most of them in central part of Russia, within 500 km distance. But grains, which are of high category/quality and also high price, unfortunately, are sold abroad, mostly in Europe. In present time, in Russia mix of low quality grains and flavor enhancers are used for bread flour, so producers of bread are interested in cheap ingredients, in fact low quality one.

In case of both box schemes there are no deliveries to hospitals and schools. In fact, Russian system are function in borders of tenders, and distributors with lower prise, but not high quality products, are often winning in this tenders. First one producer has lectures and excursions for students from agricultural universities in the region (Agricultural academy named after Michurin and High school in Kirsanovo) approximately twice a year for each one. Students are allowed to make samples and to see system. The second farm does not offer excursions, as it is rather small, and the 2 employees have to work a lot. Sometimes children from the village are coming to see the animals, the owner of the farm gladly opens for this visits.

Both of box schemes are aware of their clients, the prises are affordable for people. Present situation in country, as in crises, does not influence on demand, as people are focusing on healthy food. Both of them focused on present consumers' trust. At the same time they are working on attraction of new clients. In case of small family farm deliveries to bigger audience almost not possible, as they cannot increase farm size. Also they do not want to employee people as well as their children do not prefer to work on farm.

Big box schemes deliverer noticed that nowadays, as Russia is in WTO, process of meat production are more difficult, because of high standards, quotes and reduce of support from the government, that is why such a small scale producers as second one cannot produce meet for sales, as it has to be checked and certified, this process is relatively expensive and not profitable for small producers.

As first producer noticed in interview the biggest problem is disparity of prises, Russian agro complex cannot compete with supported farms from other countries, besides 10-15% in production is credit money, and credit rate in Russia is 20% that also increases prices of products.

As a way for big producer can be an attraction of investors to business. That is the main reason to increase sales and production. In second case export noticed that standards of production meat within WTO builds barriers to produce meet even for small scales holders. However more people are interested in meat and milk products, but there is no possibility to increase volume of production. First box scheme labour and control of employee inside of first box scheme are strict, as there are cameras and punishments in case of fails.

In both cases good relationships with concurrent inside of country are important, as there is a way to make bigger assortment and to stables prises, to be sustainable in time of present economic situation and new restrictions.

CROATIA

EKO SEVER contains the member of the family Sever who is doing ecological production of vegetables, fruit, cereals and medical herbs. The beginning of ecological production has started in 1970's with production of vegetables and fruits for their own consumption. In 1994 production has started to increase and in 2000 they became family farm (OPG- obiteljsko poljoprivredno gospodarstvo) and whole family was included in professional agricultural production. To start with, country gave them 50 ha of land in a rent for 20 years. The land wasn't cultivated for 10 years which was perfect for ecological production. They prepared 20 ha of land for production and started with it. Since the beginning, the attention was focused on the way of cultivation. The things that they were doing for them self they wanted to give to consumers as well. EKO SEVER was first farm on the list of ecological producers with first certification in Republic of Croatia which has just confirmed their vision and goals - to offer their consumers only the best and healthiest ecological products on the market. In 2015 they were selling 100 boxes per week.

FAMILY FARM VESELIĆ (Obiteljsko poljoprivredno gospodarstvo) started with organic production in 2005 by growing strawberries on only 0,25 ha of land. Today they cultivate 10 ha of land on which they grow different kinds of organic fruits and vegetables, but they also own cattle for their personal needs so the entire natural cycle is complete. In 2011 the minister of tourism Damir Bajs has opened ECOTOURISM VESELIĆ. They also offer celebrations and one day visits for up to 50 people, and presentations and tastings of their products in Organic produce tastier where anyone can buy a healthy, sweet present for their family or their own gastronomic indulgence. In 2015 they were selling 50 boxes per week.

DELIVERY/EDUCATION/COMPETITION

Both box scheme systems offers educational visits. Eko Sever mentioned that students of agriculture, from neighbour’s countries, (Austria, Slovenia, France) were coming to visit them; also students have possibility of doing practical work at their farm. They also have open days for those who want to know more about them and ecological production. They don't provide food for schools and hospitals.

The main obstacle is Public procurement law by which advantage has a products or food with lower price. Family farm Veselić is only delivering strawberries to one private kinder garden. Both of the box schemes delivers in each part of country.

Both of them agreed that they have a friendly communication with other organic producers, and the exchange of experiences as well. At the moment competition between box schemes is not present because there is still a big number of a small producer.

ECONOMICAL AND EDUCATIONAL IMPACT

Both box scheme systems said that it is necessary to include more education about ecological food, because in these days, food from the own gardens is considered as an ecological, by which people are confused. Especially they start education with kids in the kindergarten and schools. Furthermore, their opinion about the state institutions is that they could have the biggest impact on education of publicity about organic food.

EKO Sever said that market is growing and that they have enough consumers; there is no big impact of crises on their production. Family farm Veselić said that they are also managing to sell everything what they produce so far. They consider their products not too expensive, but for the inhabitants in the part of the country where they are producing the price is considered too high. Today is everything about personal priorities, they concluded.

RELATIONSHIP PRODUCER AND WORKER

Family farm Veselić employees his workers seasonally as well as family farm Sever does too. EKO Sever said that the employment of people from the outside is very complicated because of very strict laws about employing foreign workers especially for those ones who are not coming from EU. They have 9 workers with full time employment, and the rest of them are seasonal workers.

The workers have an opportunity to take product for free, if they want.

GROWTH PROCESS

About the problems of growing in the beginning, family farm Veselić mentioned difficulties related with size of the land they needed but they got a leasing land for farming. Now they are expanding their production according to market demands, and depending on new contracts and interest for their products.

Eko Sever is planning to be more focused on the production inside of greenhouses during whole year, not on the increase of land surfaces anymore, and to use their capacity as much as they can.

The main principles in work with clients to make personal contact and to show system of production.

ITALY

'Biokistl Südtirol' was the first box scheme system in South Tyrol, North of Italy. Two farmers had the idea to deliver their products via box scheme. So the box scheme increased and they delivered to the whole territory of South Tyrol. After a while the two managers decided to separate and a new box scheme system with the name 'Bioexpress' was established. Both are a joined collective within South Tirolian farmers, who put their products on the market and sell it by box schemes or shops to the consumer.

They buy products from Italy or outside if it's necessary like in the winter month as well. Exotic fruits were purchased from fair trade organisations. All products are 100% organic certified and mostly of them are local and seasonal.

DELIVERY/EDUCATION/COMPETITION

'Bioexpress' does an educational work for schools if they are interested. It's not a pecuniary reward but a supply of service. For children from nearer schools it is important to learn the agricultural products and their aspect.

They deliver not only to households and offices but also to schools. 'Bioexpress' is also interested to deliver to hospitals, but they consider their self too small for that. The hospital in South Tyrol does tenders and the cheapest provider wins. So it's difficult to be competitive against the prices of the bigger opponents.

'Biokistl Südtirol' does also gladly awareness training by interest. They guide a project in the primary school in South Tyrol, where they show how to use so called 'B-products' for soups or others and not to litter because of their bad wrinkly look and black spots. They deliver to households and offices but also fruits and vegetables to kindergartens for snack and lunch. 'Biokistl Südtirol' wants to deliver also to schools, but this is still in development. In the past they delivered apples to hospitals, but now the hospital buys the apples from a farm in Italy because they are cheaper.

'Bioexpress' delivers in the area near Milano and 'Biokistl Südtirol' in boarders of South Tyrol. So they don't get in competition of each other.

ECONOMIC AND EDUCATIONAL IMPACT

About the economic and educational impact on consumer behaviour there are different opinions. For one box scheme system the education has a high impact on the consumer behaviour. People with higher education are more interested to buy ecological and local. The economic status has also an impact on consumer, for example in the north of Italy there are now problems in buying ecological qualitative products by direct selling because of the economic crisis. For the other box scheme system the education has smaller impact than economic status. They have customers from different societies.

RELATIONSHIP PRODUCER AND WORKER

Both interviewed box schemes do not have own agriculture area. They purchase their products from regional farmers. The farmers are employing their workers depending on their needs. They provide accommodation for their workers.

GROWTH PROCESS

The volume of production and sales are constant for both. 'Biokistl Südtirol' has now more shops and the number of boxes per year is reducing in the last years. The reason for this could be the high offer by ecological products in supermarkets. 'Bioexpress' is content to be economical constant, despite the economic crisis in Italy.

Discussion

Survey and skype interview results showed that box scheme systems in Serbia, Croatia, Russia and Italy are mostly similar but the ways of productions, certifications and employment are different.

Production depends on climate, size of fields, policy in countries and demand. In fact in Russia, Croatia and Serbia box schemes were established as a farm originally and started to work with direct marketing, in fact, box schemes developed later. This changes have been done because retail chains were taking biggest part of profit. Also concurrence on market increased, because big supermarkets with lower prices disparity were opened. In Italy interviewed box schemes are not producers, they are just delivers. The size of the farms might be one reason. Italian organic certified farms are smaller and their number have been decreased in last years, as there is an uncontrolled import of organic products from other countries. In case of Croatia and Serbia all box schemes are certified and just a small share in boxes are not from their own farm. In Russia there is no national certification, but there are certification bodies from Europe, but still very expensive and often not accessible for average farmers. Also there are a support programs in Italy, Croatia and Serbia, which cover part of spends on ecological products. In case of Russia there is support for conventional producers, there is no motivation to produce organic, as final prices are uncompetitive. Also spend on labor influence on final prices. Both in Russia and Croatia workers are local. In Russia salaries paid for workers are low, farmer do not need to find chipper labor. In Croatia there is a law, that makes farmers employ workers from the own country. In Italy anyone can be employed, that allows people from another countries to work for lower salaries.

Comparison shows that systems are different within each country, but nevertheless usable. Box scheme system has to be adopted to each region in country individually. With a huge support of government it will allow to develop organic and sustainable agriculture in every country.

References

Act on Organic Production of Agricltural Products and Foodstuffs, Official Gazette (Narodne novine), No. 12/01, 14/01, 79/07.

AYALA D. AND KOLCHEVNIKOVA O. (2011): Russian Organic Market Taking Root.

Biologische Landwirtschaft aus www.provinz.bz.it (14.06.2016).

BOŠNJAK, K. (2007): Čimbenici uspješnosti plasmana ekološke hrane na hrvatskom tržištu, Faculty of Economics and Business, Zagreb.

Culacov Opportunities of production within ecological standards in Russia (2013): 8-10.

Euromonitor http://www.euromonitor.com/organic-packaged-food-in-russia/report

EUROPEAN CSA RESEARCH GROUP (2016): Overview of Community Supported Agriculture in Europe, 24-99.

HARITONOV (2013): Perspectives of market of organic foods in Russia; http://www.greenpatrol.ru/ru.

KALENTIĆ, M., STEFANOVIĆ E., SIMIĆ, I.and MAERZ, U. (2014.): Organic Agriculture in Serbia At a Glance, 18-39.

PETLJAK, K. (2012.): Distribution channels of organic food in the Republic of Croatia, 73-96.

SEYFANG, G. (2008): Avoiding Asda? Exploring consumer motivations in local organic food networks. Local Environment 13 (3), 87-201.

TORJUSEN, H.; LIEBLEIN, G. AND GUNNAR, V. (2008): Learning, communicating and eating in local food-systems: the case of organic box scheme in Denmark and Norway. Local Environment 3, 219-234.

VENN, L.; KNEAFSEY, M.; HOLLOWAY, L.; COX, R.; DOWLER, E. and TUMOAINEN, H. (2006): Researching European 'alternative' food networks- some methodological considerations. Area 38 (3), 248-258.

ZANOLI, R. AND JUKIC, N. (2005): Marketing study on organic and other selected special quality products from Croatia. Available at: http://www.fao.org/docs/eims/upload/229929/2005_12_doc01.pdf, 10 March 2012.

PECHKINA, EGOROV (2012): Market of organic production // Economics of agriculture, 8, 50-59.

ORGANIC BOX SCHEMES
SECTION CANADA, USA AND AUSTRALIA

Benedikt Blankenhorn, Robert Slade, Margot Siderits

TABLE OF CONTENTS

Introduction and Methods

This chapter focuses on Organic Box Schemes in the regions of Canada, USA and Australia. Although originally to focus only on North America (excluding Mexico), other regions were also looked at as a method of getting more responses to the online survey conducted during our research.

The Organic Box Scheme (OBS) can be defined as an Alternative Food Network (AFN) with the purpose of connecting the consumer to an array of generally local and “fair” producers while providing the convenience of a grocer service. As opposed to CSAs (Community Shared Agriculture), which are yearly, often entirely localised produce-subscription services (consumers pay [often] a lump-sum at the beginning of the year and receive [rather exclusively local] product weekly, biweekly or monthly), OBSs are based on more of a conventional consumption (supply and demand) approach, where product is purchased as needed or desired by the consumer.

The concept of OBSs started out in Switzerland in the 1980’s, and moved on to Northwestern Europe into the mid to late 80’s. By the mid to late 1990’s, the rest of Europe as well as the USA also started seeing their first box schemes started as well (Furtschegger, Schermer, 2015; Haldy, 2004). Into 2015, European OBSs have since continued to grow significantly in popularity, however, in North America the CSA remains one of the most popular forms of AFN. OBSs are not widespread throughout the USA and Canada, with the majority near urban centres on the West and East coasts. Due to a lack of literature found on OBSs in the region of Oceania, it can be assumed for the case of this chapter that it follows the trends of North America.

The first task was to research the topic of OBSs to find as many candidates within the predefined area of North America (excluding Mexico) as possible. This task proved more difficult than anticipated due to the fact that the term “Organic Box Scheme” is not widely used in Northern America. Although many hours were spent doing research, this task of determining whether or not the company in question met the criteria of a box-scheme made it probable that several OBS-type businesses were missed. In contrast to fairly defined definitions of CSA, OBS and online grocer in the UK and the rest of Europe, in North America and Oceania, these terms appear to have rather undefined lines between them; they are at times interchangeable. Few North American box schemes define themselves so, often calling themselves CSA operations or online grocery service. Search terms used in internet searches included: (organic) veggie box schemes, organic box schemes, vegetable delivery service.

In total, there were 49 Box Scheme-type businesses found in North America (30 in Canada and 19 in USA). The next step, was to collaborate with the other groups to put together an online survey. All groups came up with their own individual questions to include in the survey; these raw questions were then edited, compiled and compacted into one document to be sent out in all project sections. The completed survey was then sent to the 49 OBSs already mentioned, from which only 5 complete responses were received. In an effort to achieve more results, reminder emails were sent out to all OBSs, and it was decided to look elsewhere, and 7 more OBSs were found between Hong Kong, New Zealand and Australia. From these actions, 4 more completed surveys were received; therewith, the total number of completed surveys was brought to 9.

In an effort to get more qualitative information, a series of four qualitative questions was sent via email out to all 9 survey participants, and four replies were received. The results of both the quantitative and qualitative portions will be explained in detail in this chapter.

Survey results - Quantitative Analysis

In this chapter some findings of the online survey are highlighted. Data on the organization types, founding years and the numbers of boxes sold is illustrated as well as delivery distances and what the box schemes perceive as 'local'. Furthermore information on the product categories sold in the boxes is included.

Organization and size

This section gives an overview of the organizational types of the box schemes that completed the survey and shows the average number of boxes sold. Also the reasons for box schemes to grow bigger or not are explored.

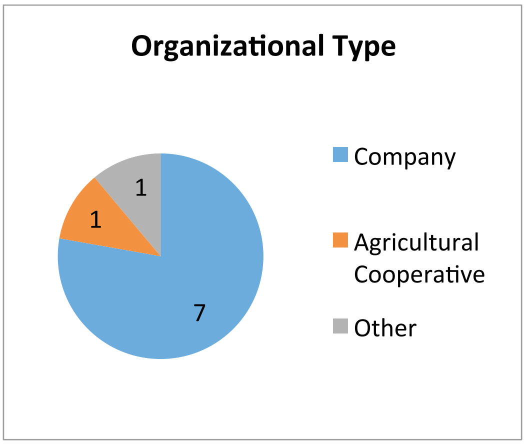


Figure 7: Organizational type of the box schemes.

Of the nine box schemes that completed the survey the majority is organized as a company. One Canadian box scheme works as an Agricultural Cooperative and one box scheme from the USA is organized as a B Corp (Figure 7). B Corps are for-profit companies certified to meet rigorous standards of social and environmental performance, accountability, and transparency.[9]

[9] https://www.bcorporation.net/what-are-b-corps (last accessed: 06.06.2016)

Table 7: Founding years of the box schemes.

Box Scheme	First Year
AUS1	2014
AUS2	2006
CAN1	2001
CAN2	2010
CAN3	1997
CAN4	2014
CAN5	2000
USA1	1999
USA2	2011

Table 7 shows the founding years of the box schemes in Australia, Canada and the United States of America. The longest running of the nine box schemes is from Canada (CAN3) and was established in 1997. The Australian AUS1 and Canadian CAN4 are the youngest two box schemes, both founded in 2014.

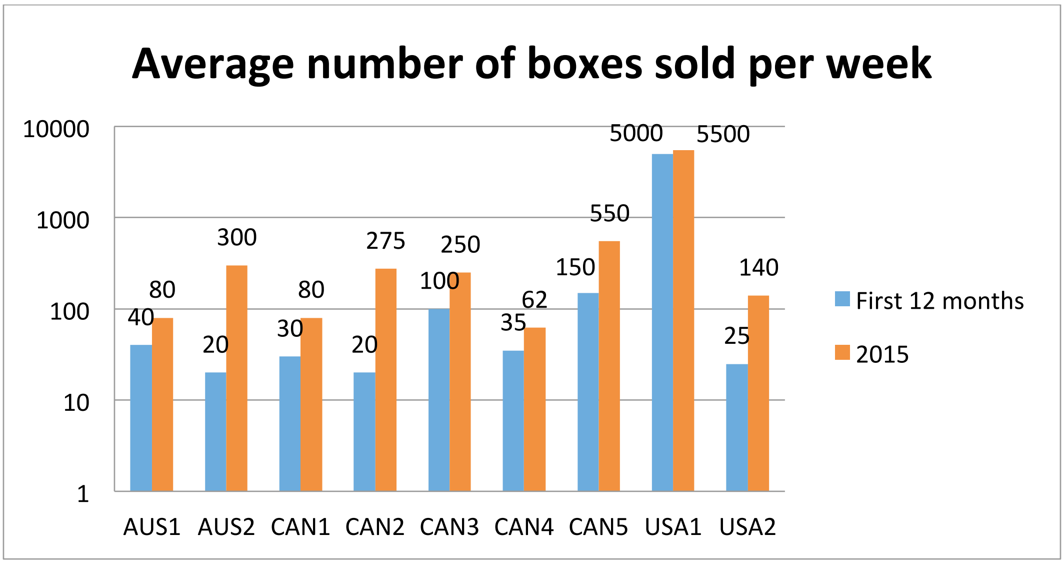


Figure 8: Average number of boxes sold per week in the first 12 months and in 2015 - logarithmic scale.

Figure 8 compares the average number of boxes sold per week in the first 12 months after the box schemes were founded and the average number of boxes sold per week in 2015. The trend is positive for all nine box schemes as they were all able to increase the number of boxes sold from their first year in business to 2015. The number of boxes sold per week in the first year ranges from 20 to 5000, in 2015 from 80 to 5500. The founding years of the box schemes range from 1997 to 2014 (Table 1), therefore a direct comparison is not possible as the businesses had different amounts of time to develop. USA1 is by far the biggest of the analyzed box schemes with more than 5000 boxes sold on average per week. The other eight box schemes sell on average between 80 and 550 boxes per week.

In the survey the box schemes were also asked if they would like to increase the number of boxes sold. Only one business answered No with the explanation that capacity, space and work/life balance would not allow them to grow more. All other box schemes are interested in increasing their sales. Table 8 shows the answers the box schemes gave why they want to pursue a growth of their businesses:

Table 8: Reasons for box schemes to increase their sales.

Would like to grow our healthy communities and help our local farmers.
We have the potential to grow.
To meet our increasing production.
In order to reach a break-even point and also to create a more robust alternate food system.
To become more sustainable as a company.
So we can fill up our pension plans.
It's always good to grow your business. but there is something to be said for scale and we are fairly comfortable where we are, but could take on another 100-500 customers without changing our infrastructure.
We need to sell more boxes for our service to be sustainable.

Distances

In this part delivery distances and box schemes' perceptions of what distances they consider as local/regional are illustrated.

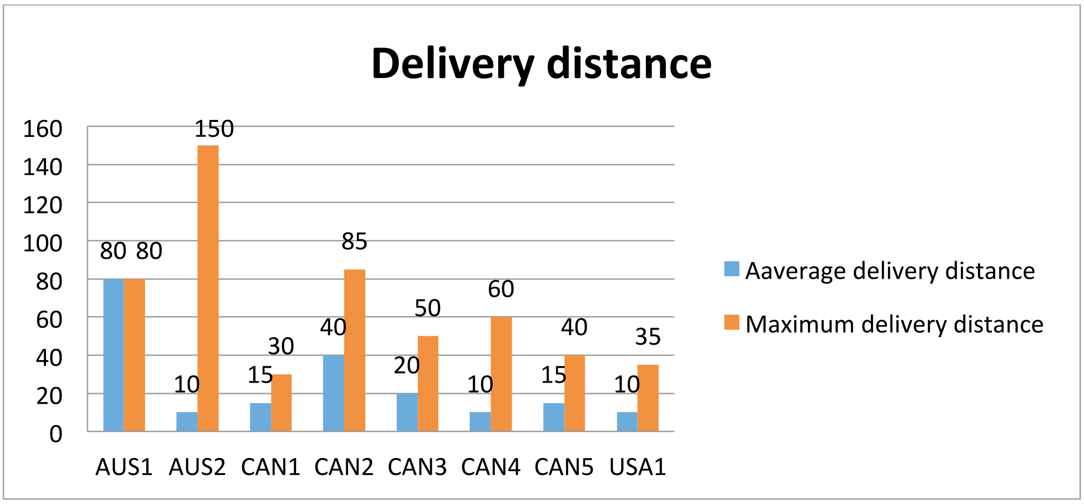


Figure 9: Average and maximum delivery distances in km from the main distribution center to the customer.

The nine box schemes have average delivery distances ranging from 10 to 80 km from their main distribution center to the customer. Maximum delivery distances are often a lot higher and can be more than double the average distances. For AUS1 the average delivery distance equals the maximum distance and both are with 80 km quite high compared to the other box schemes. Only AUS 2 and CAN2 have a higher maximum delivery distance. AUS2 has an average delivery distance of 10 km while its maximum delivery distance is more than 10-times higher (Figure 9).

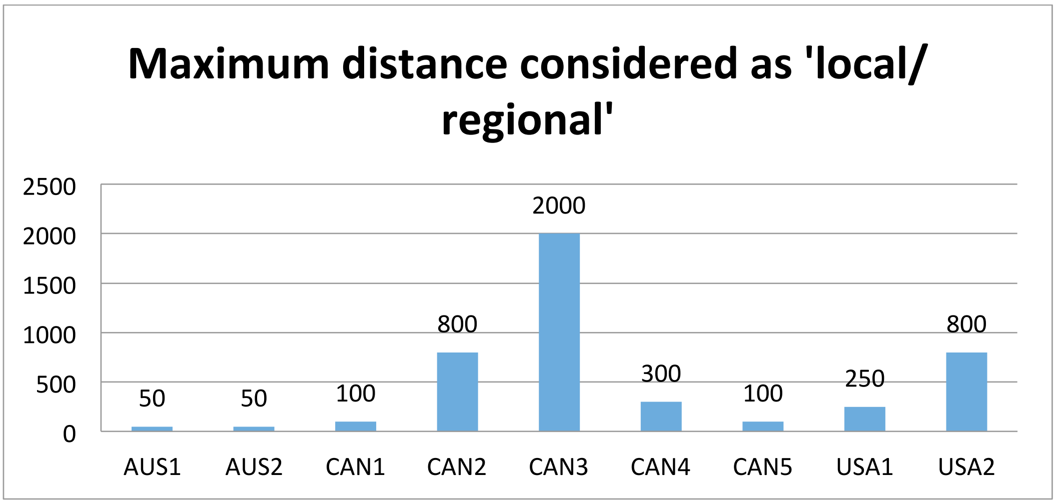


Figure 10: Maximum distance considered as local/regional.

All of the box schemes that finished the survey sell local/regional products in their boxes. Figure 4 shows what maximum distance the box schemes consider as still being local or regional. The results vary strongly and range between 50 and 2000 km. The Australian box schemes both indicate 50 km as the maximum distance they consider as local. This number is by far the lowest compared to the answer of the other box schemes. CAN2 and USA2 agree that a distance of up to 800 km can still be considered as local. CAN3 even considers a maximum distance of 2000 km for local/regional products (Figure 10).

Product categories

In this chapter the product categories the box schemes sell in their boxes are illustrated.

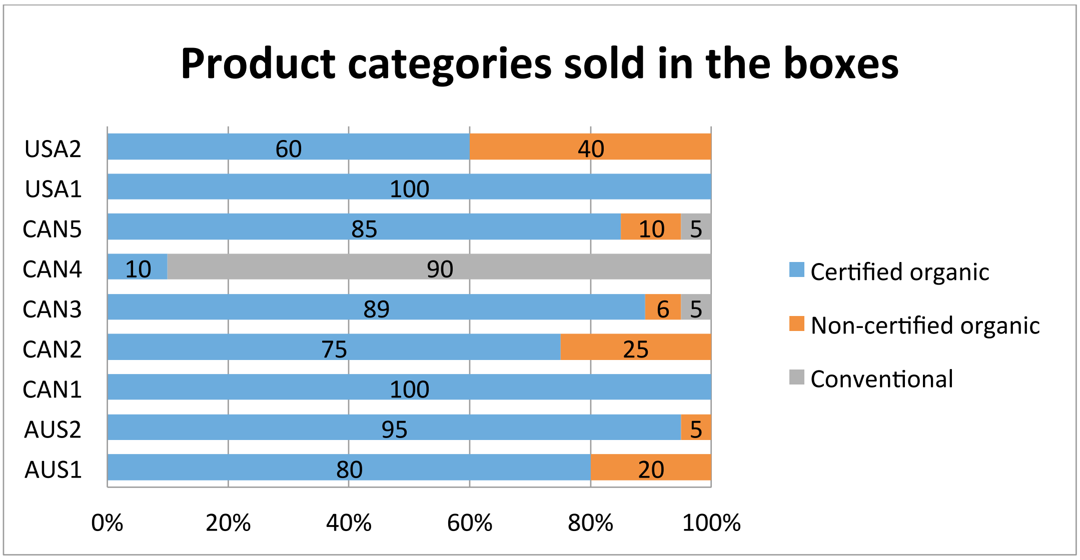


Figure 11: Product categories sold in the boxes in %.

With the exception of CAN4 all box schemes sell predominantly certified organic products. As an explanation CAN4 states the following as an additional comment:

"We do not feel there is enough land available to humankind to mass produce organic foods. We strongly believe in GMO foods as an alternative to pesticides. Conventional farming is far better for the environment in this respect and organic pesticides are no better for human consumption."

USA1 and CAN1 sell only certified organic products in their boxes. Six out of the Nine box schemes sell certified organic and non-certified organic products. One third also includes conventional products in their boxes. All three box schemes that use conventional products are from Canada. While CAN3 and CAN5 sell 5 % conventional products CAN 4 sells more than 90 % conventional products in the boxes (Figure 11).

Qualitative Analysis and Discussion

Of those organic box scheme which completed the survey, a secondary questionnaire was sent in order to delve more deeply into the qualitative aspects of box schemes, as opposed to the more or less quantitative questions of the survey itself. This section of the chapter will discuss and analysis these qualitative questions and conclusions, as well as explore some final thoughts which can be drawn from such answers, as well as any new questions which were themselves drawn out by such questioning.

In the first question participants were asked:

"What role do you see organic box schemes playing in providing quality food to urban populations in the future?"

The overall role of box schemes comes into question when taken in the context of large urban areas, areas which typically rely heavily upon long distance transport from packing houses and other agricultural middlemen. When asked about their role in such urban areas aspects which counted among the most important were convenience to the consumer, as well as a desire of the consumer to support local agriculture, and be in closer contact to the production of food, *"Convenience, plus a connection to a farm(s) / farmer(s) and a sense that you are supporting the local agricultural system"* were cited as top concerns. An important aspect was the expectations of the customer to have not only vegetables delivered to their door, but also to, in effect, have a full service supermarket brought to their door step via the box scheme, "*With customers now expecting a full service grocery delivery I think we will find services that provide not just organic produce, but food from all the food groups growing in the future*". Thus the notion of a box scheme which only delivers vegetables to the front door of customers, the "bare necessities" as it were, may well be short lived in large urban areas which have become accustomed to the modern super market and all of its conveniences. The modern urban consumer thus demands the banquet of a super market at their door step, as well as the intimacy that is promised by thebox scheme. If this duo is practically and economically feasible is still to be seen as organic box schemes seek to provide the promise of healthy food directly from the farmer as well as to adapt to the challenges of creating, maintaining and growing a business. What is of significance in this whole discussion is that no matter how urbanized a population is, that there still exists the desire to have a closer and more intimate connection to the actual source of food production. Reestablishing this connection to is what box schemes promise, explicitly or implicitly, to the consumer, "*Virtually all accounts of local food benefits include a multiplier effect from the interaction or reconnection of producers and consumers. Reconnection generates intangible qualities; some piece of added value that is difficult to quantify because it relates to the perception of participants*" (Mount, 2012).

In the second question participants were asked:

“Do you believe that organic box schemes can provide food to large urban centers and still retain the quality, and the sense of intimacy and closeness to food production, that is promised by such a product? If so, why?”

One of the serious challenges faced by both box schemes and the farmers is related to scale, and the ability to provide quality food at a scale appropriate for large urban centers. If box schemes are unable to address this issue then they are doomed to remain on the fringes as specially markets. One box scheme answered this challenge of scale by pointing to the creative and communicative ability of the box scheme itself, it “*depends on how the program is run, including communication with all the customers, but in short yes we do believe this possible*”. Another box scheme pointed to the challenges inherent in such an undertaking, “*The difficulty is that smaller farms don’t necessarily have the infrastructure to harvest in such a way that the produce can survive transport, packaging, and delivery, and still be in great shape. Particularly in an area which is very hot, like LA*”. Although a highly hypothetical question to pose, it is of value to understand where box schemes envision themselves to be heading towards as well as to understand the challenges which they face.

In the third question participants were asked:

“In terms of organic agriculture in general, or organic box schemes in particular, do you have a vision of the future or something you would like to realize and help move towards?”

Though quite hypothetical in nature, these questions were aimed at better understanding the mindset, assumptions and hopes that various box scheme enterprises had about their business as well as Local Food Systems in general. One box scheme answered its question by indicating that they

“*Would like to see more and more people choosing to purchase local, organic food whether through a box program, at farmer's markets, or at stores. There is still room for growth in this sector in our area, as many people just shop at the grocery store and don't think about where their food is coming from or how it is produced- price still seems to be the greatest deciding factor. While some of our prices may be higher, they are not that much higher and our quality is far superior. We would love to see more people in our region realize the true costs of cheap food coming from elsewhere: it's only cheap because some other place and other people are paying the price for us in the form of human rights abuses, low wages, and environmental degradation. We would love to see more people in our region also find the joy in eating locally, more peace of mind and the pleasure and taste of truly good food*.” Both numerous and significant themes are explored here by the box scheme such as the “true costs of cheap food” and making clear and conscious decisions about buying choices.
Another box scheme pointed to the necessity of, “*A local food distribution infrastructure which makes things move much more easily*”. Mount deepens this question by asking, *“Where can local food initiatives—incorporating the production of family farms—come together with a sufficient consumer base, yet in a manner that encourages closer relationships, and shared Responsibility”* (Mount, 2012)? His answer is practical and nuanced, *“There are no easy solutions, and many of the current alternatives—including institutional procurement, values-based value chains and regional consumer or producer cooperatives—often sacrifice interaction and shared responsibility in favor of practical logistical considerations”* (Mount, 2012). This less philosophical but more practical aspect is critical for the development and growth of Local Food Systems in general as the competition, as mentioned earlier, already has an immense distribution infrastructure in place.

In the fourth question participants were asked:

"Where do you see, or would like to see, your organic box scheme in the next few years? 10 years? If growth is the goal, how big is too big, if at all?"

Once again we revisit the question of growth and scale because it is such an important aspect when considering the future of Local Food Systems. One box scheme explained,

"*This all depends on the size of the farms and what each farmer's goal is. We would like our box program to grow specifically in proportion to the production of our member farms. Our aim is not supply our entire region, but for our farmers to make a good living. There are many other box programs in our area, so they too could fill growing demand too*".

From a business standpoint this is a fascinating perspective because "the bottom line" is not the only imperative, yet of course still critical. Other important aspects are the desire for the "farmers to make a good living", not to grow at a geometric rate but rather "to grow specifically in proportion to the production of our member farms", and lastly the desire not "supply our entire region" because "there are many other box programs in our area, so they too could fill growing demand too". It is quite heartening to see a business ethic which does not subordinate all other concerns to quarterly profits. It may well be argued that this new business ethics is at the forefront of a new way of doing business, a way of doing business that more closely approximates the values of organic and sustainable food production. Though necessarily, a business is always a business, one box scheme answered by saying that, "*We need to grow our business base in order to be viable.*" This simple and straight forward answer is at the heart of the need to have a viable business to begin with, one that makes money for its owners, employees and shareholders, before delving into the world of a more ethical and human model of doing business. Of course these two aspects are interlinked and cannot be separated, but the best philosophy in the world won't "put food on the table." One box scheme discussed the desire for, "*A regional food service covering predominantly Southern California, but possibly also other areas that can be delivered to by overnight ground (further north in California, as well as areas in Nevada and New Mexico*." Thus the balance of philosophy/ethics and business practicality seems to be of great concern to box schemes in general and which may become a model for other businesses as well. One box scheme responded by addressing all questions at once. The following is a very good overview of the practical challenges and business philosophy shared by many box schemes, and is therefore given in its entirety. Passion is a key component of making any enterprise successful, and this clearly comes through:

"*My Washington business supports many different farms from Washington throughout our growing season. We also purchase locally roasted coffee, honey, bread, and granola. But, since we operate all year round, we do buy from wholesalers which enables us to buy produce from California, Texas, Arizona and Mexico to fulfill our needs for the rest of the year. We still support seasonal eating- we don't buy summer fruits from other hemispheres in the winter… We are a hub for information on agriculture and farmers, providing as much as customers desire. We are also able to bring our customers specialty items and heirloom varieties of fruits and vegetables that are not available in the grocery store. I have developed great relationships with growers and I am also a consumer of everything I purchase. So, knowledge and trust are two reasons why Box companies should remain attractive options for customers. My company has always been all organic. I do see organic agriculture thriving in the future (at least I hope so!) It's important to be profitable, but I also see the need for scale in maintaining the level of quality, local support and customer service that I believe are important aspects of what we do. We have room to grow, but we are conscientious about all* *of the above. I do hope to be delivering to more customers in a larger area of Western Washington over the next 10 years. I believe box subscription home delivery companies like mine play an important role in supporting local agriculture wherever they are in the country. We provide an alternative and/or additional outlet for small farms which is very attractive for many reasons. They can sell large quantities of their crops on a weekly basis to one location, while still getting a fair market price. Farmer's markets can be a good source of income for a farmer, but they take a lot of work and they end up with a lot of produce that goes to waste. And if they have to sell to a wholesaler, they will have to sell for less money per box so unless they have enough produce to make $ on volume, it doesn't work. I guess what I am saying is I see a need for a multi layered system which is what we have here in Washington now.*"

Conclusion

In this chapter, the focus has been on answering the question as to whether or not box schemes in the regions of Canada, the USA and Australia are able to manage growth in such a way that goals and values like local production, social justice and communication between producers and consumers are supported. The majority of the discussed sample of box schemes appear to hold to these values, and their maintaining of these values through growth is inherent in retaining their image. While nearly all OBSs have stated that there is a desire for growth, trends show that growth is limited; this limitation is likely severely influenced by balancing act of maintaining this image.

Considerations

This chapter cannot of course illustrate all box-schemes in North America and Australia, firstly, as the majority of operations (including those which are larger-scale) opted out of participating in the survey, and secondly, it is impossible to insure that all OBS-form companies were found. It is speculated that one significant factor leading to several companies opting out of completing the survey was the lack of anonymity within it. This speculation comes from the fact that although 9 companies completed the survey, 14 additional companies viewed it before closing the window. It is reasonable to assume that many of these companies were wary of providing personal information along with numbers and facts relating to business – both of which were asked of participants. It can also be inferred that many larger operations refrain from publicising sales numbers as an effort to appear to maintain the qualities associated with smaller-scale box-schemes. In the majority of cases, the only evidence of numbers regarding sales for even the OBSs that participated was the information provided via the aforementioned survey. However, one piece of evidence of size was provided in the form of a case study of a much larger American OBS, "Full Circle". This case study of Full Circle shows exactly the potential difference between the box schemes which participated, and those which did not. The information from 2012 can be used to compare their 16500 weekly customers (Ostrom & Stevenson, 2013) to the maximum of 5500, and average of 800 weekly customers displayed in the survey. Therefore, it can be said that this chapter describes the OBS situation of only a small sample of small-scale OBSs within the defined regions.

References

FURTSCHEGGER, C. and SCHERMER, M. (2015): Full case study report – Biohof Achleitner Austria. University of Innsbruck.

HALDY, H.-M. (2004): Organic Food Subscription Schemes in Emerging Organic Markets: TEI-KEI, CSA and Box-Schemes. In: Proceedings of the 6th IFAOM-Asia Scientific Conference, Research Institute of Organic Agriculture, S. 174-189.

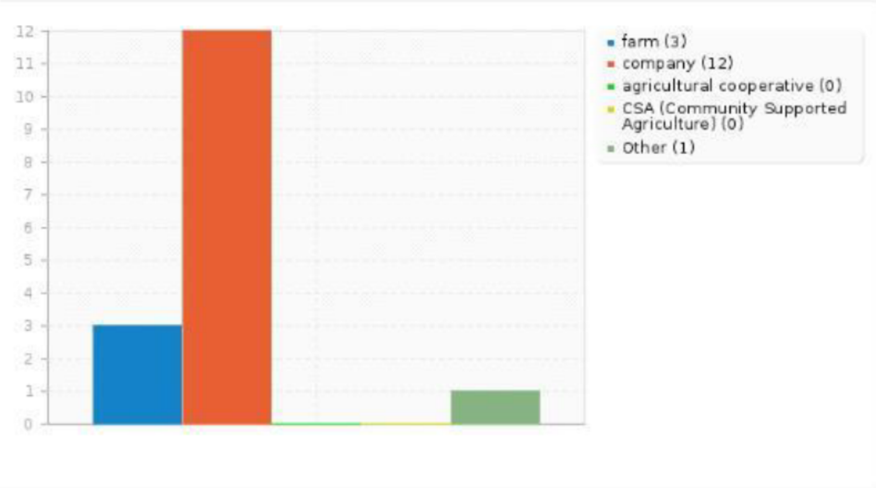
MOUNT P. (2012): Growing local food: scale and local food systems governance, Agric Hum Values, volume 29, 107–121

OSTROM, M., & STEVENSON, G. W. (2013): Full Circle: A Case-Study, (October), 1–14.

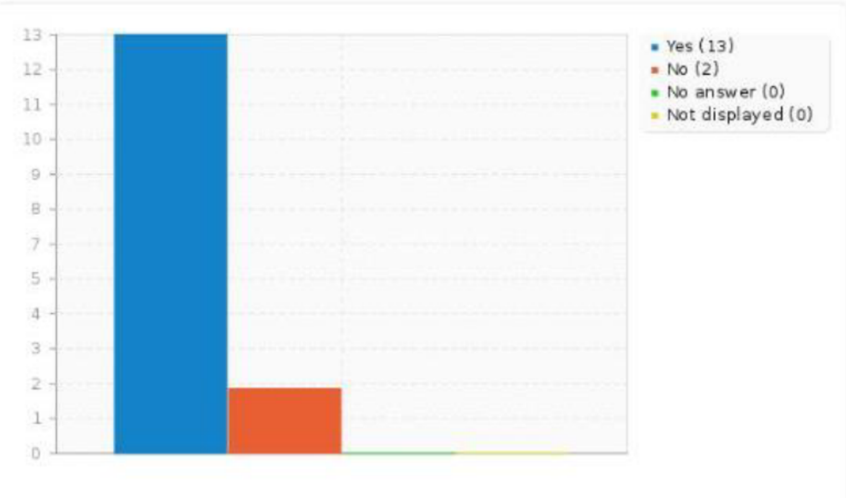
APPENDIX: SURVEY RESULTS OF THE DIFFERENT COUNTRIES UNDER STUDY

SURVEY RESULTS AUSTRIA (n=15)

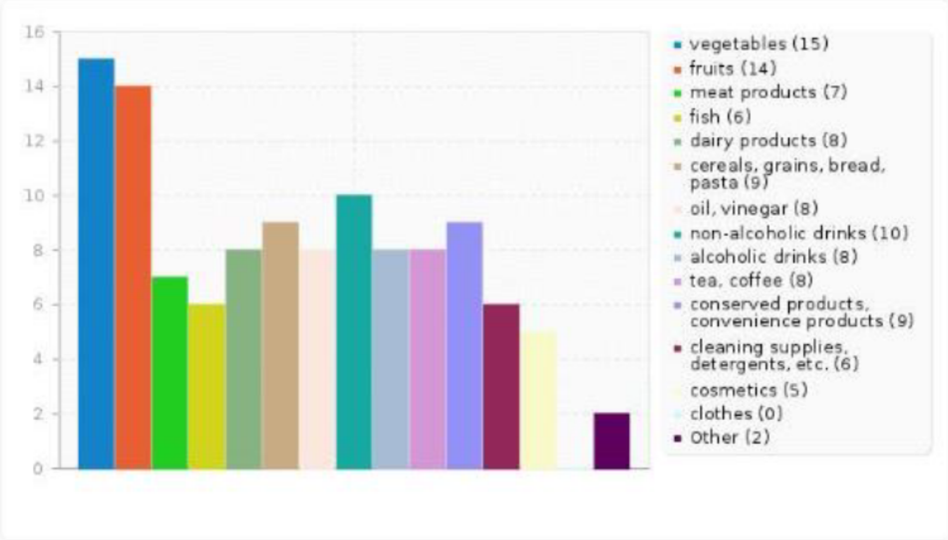
What is the organizational type of the box scheme?



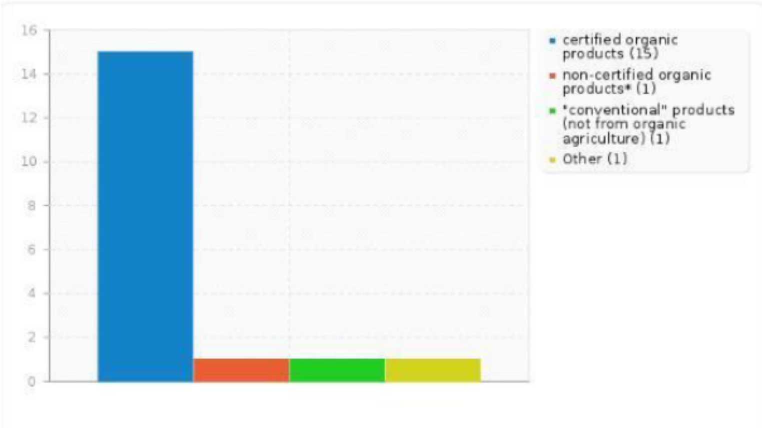
Would you like to (further) increase the number of boxes sold?



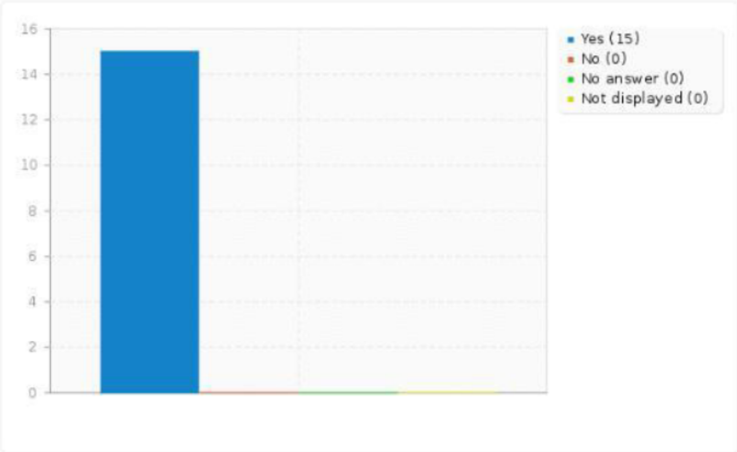
What products do you sell in the boxes?



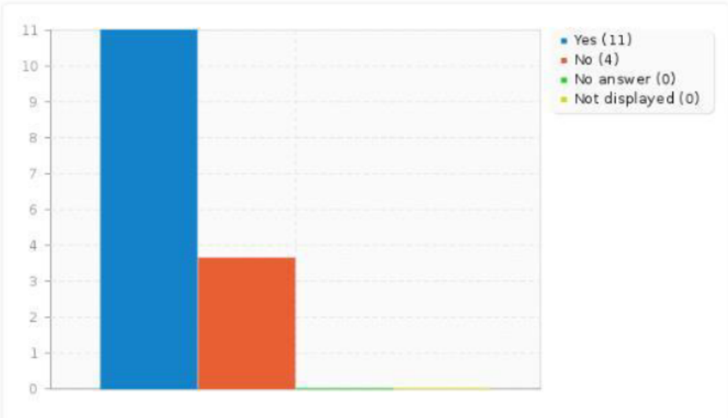
How are the products in the boxes produced?



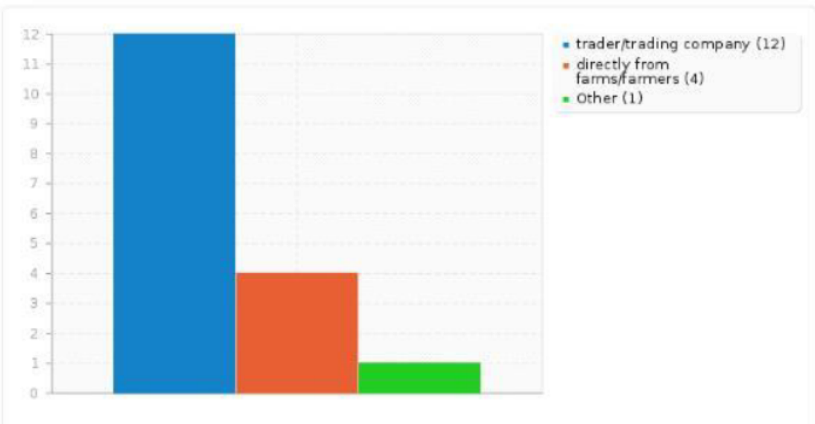
Do you sell local/regional products in your boxes?



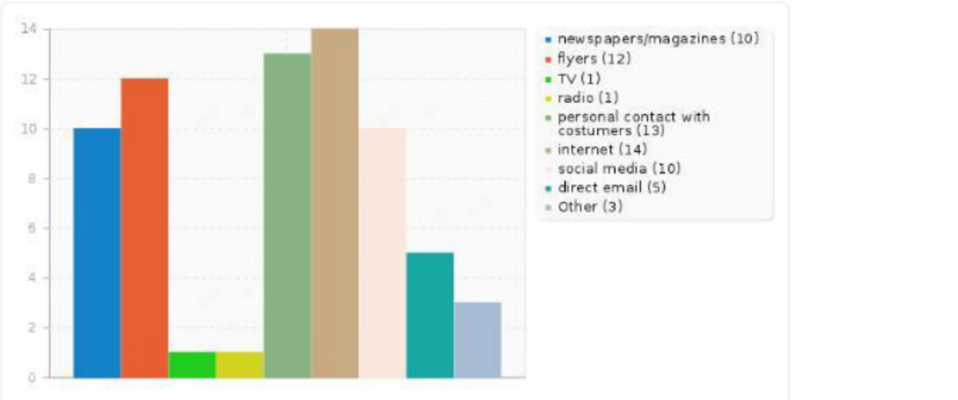
Do you also sell imported products in your boxes?



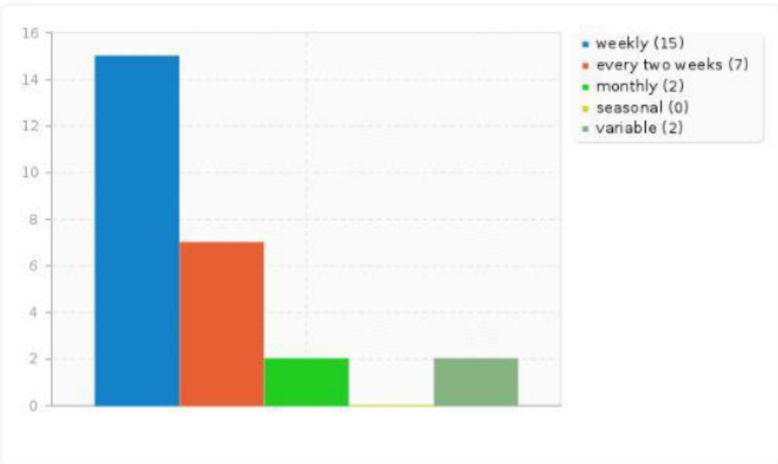
If you also sell imported products, from whom do you buy imported products?



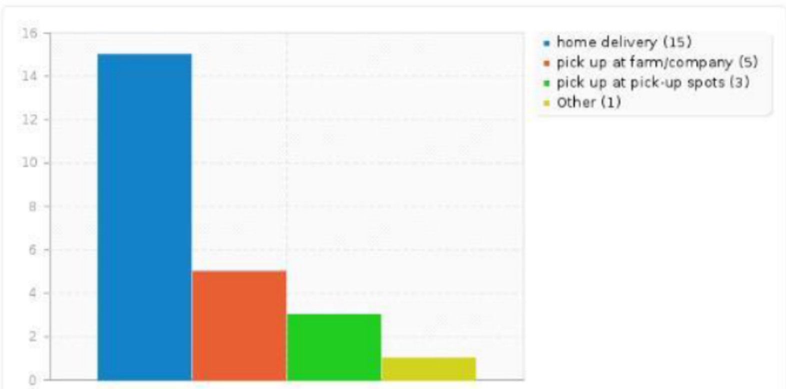
Which channels or media do you use for advertising?



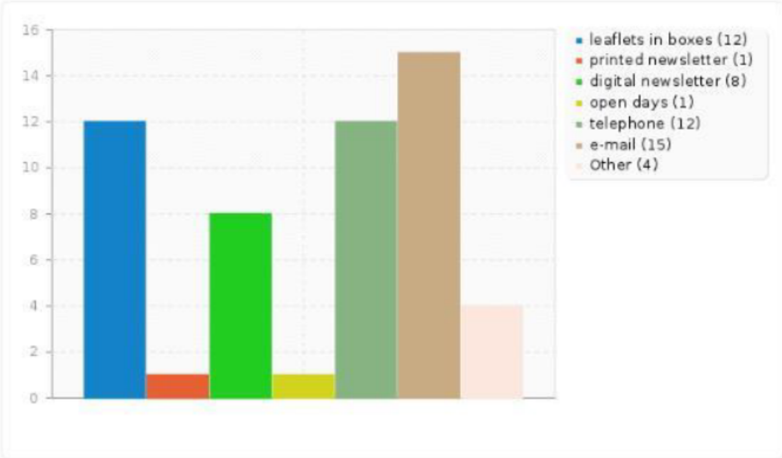
At what frequency do you deliver your boxes?



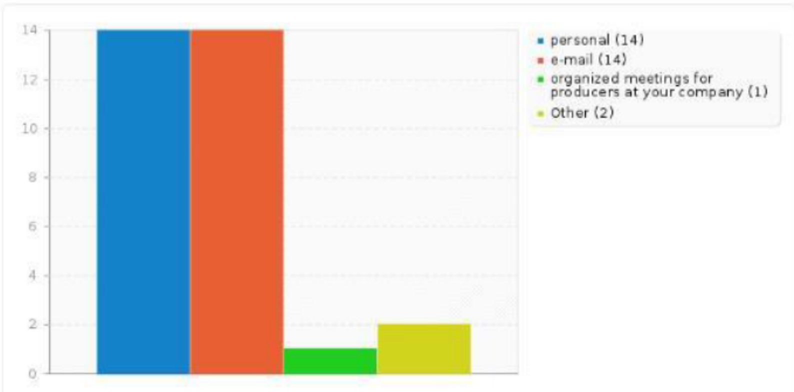
How do your clients receive their boxes?



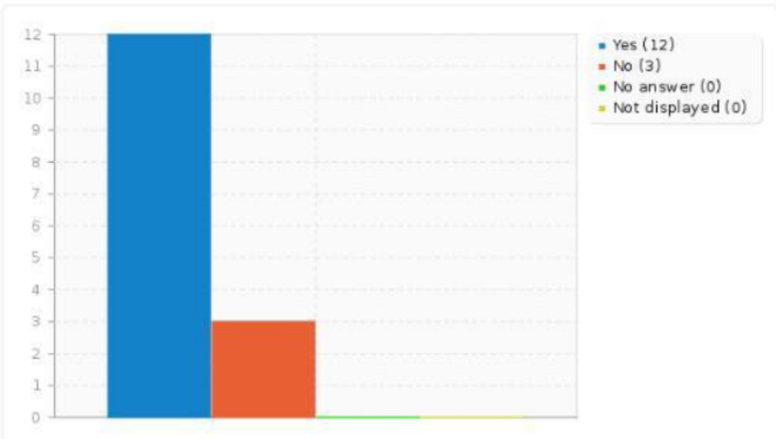
How do you communicate with your customers?



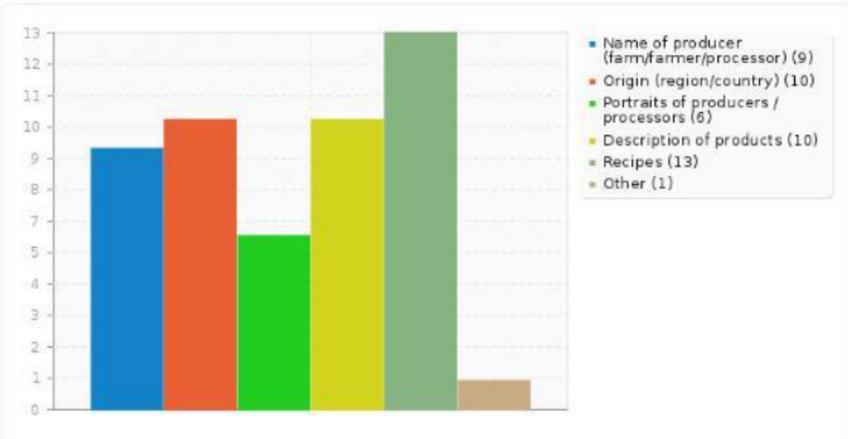
How do you communicate with your producers?



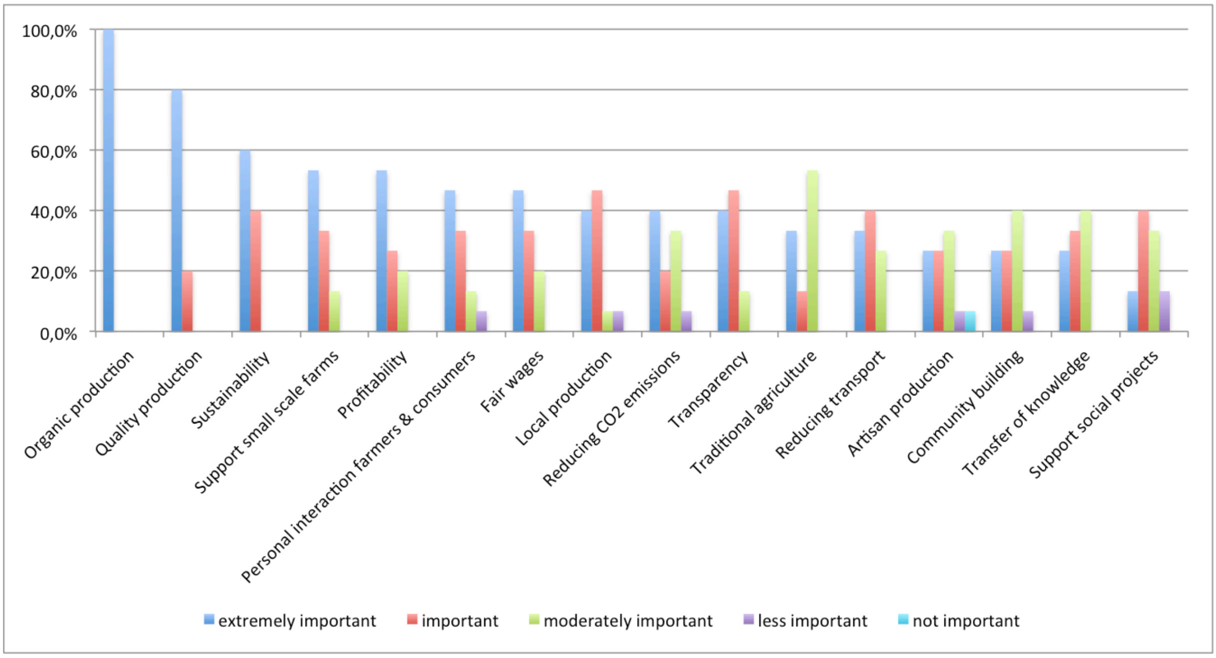
Do customers and producers of the box scheme have the opportunity to meet personally?



Please indicate which information you provide to your consumers about the products in the boxes.

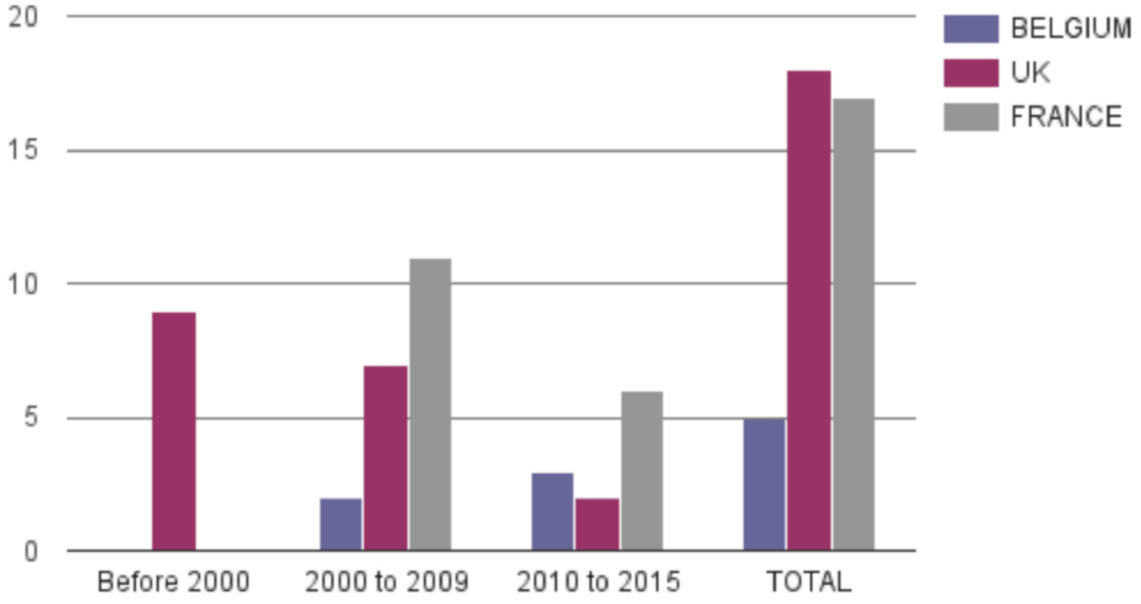


How important are the following goals and values for your company?

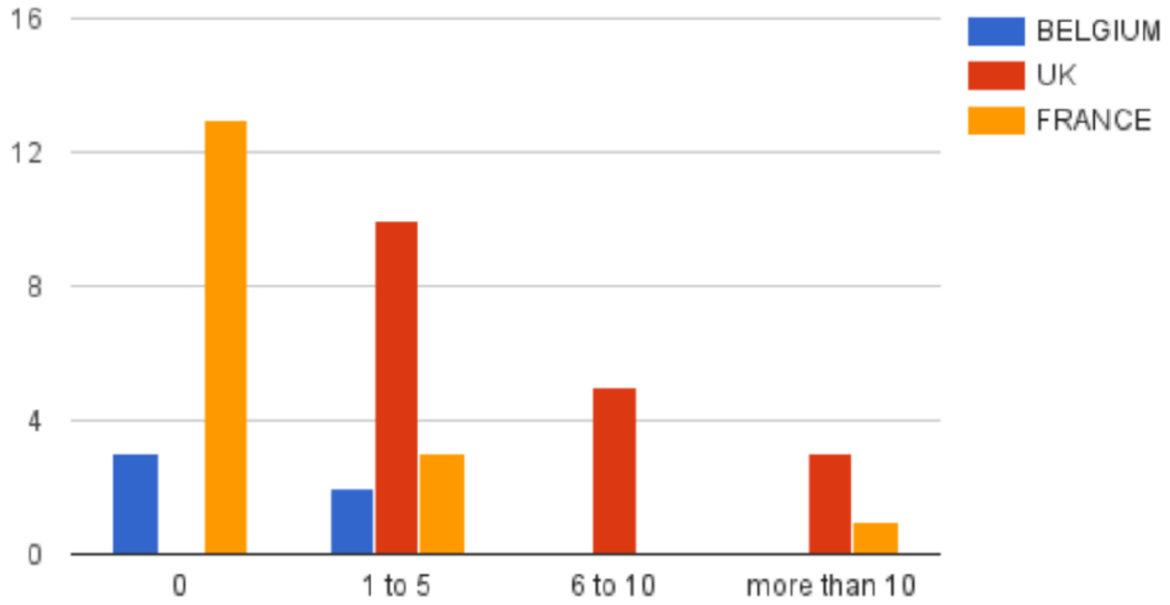


SURVEY RESULTS
BELGIUM (n=5), UK (n=18), FRANCE (n=17)

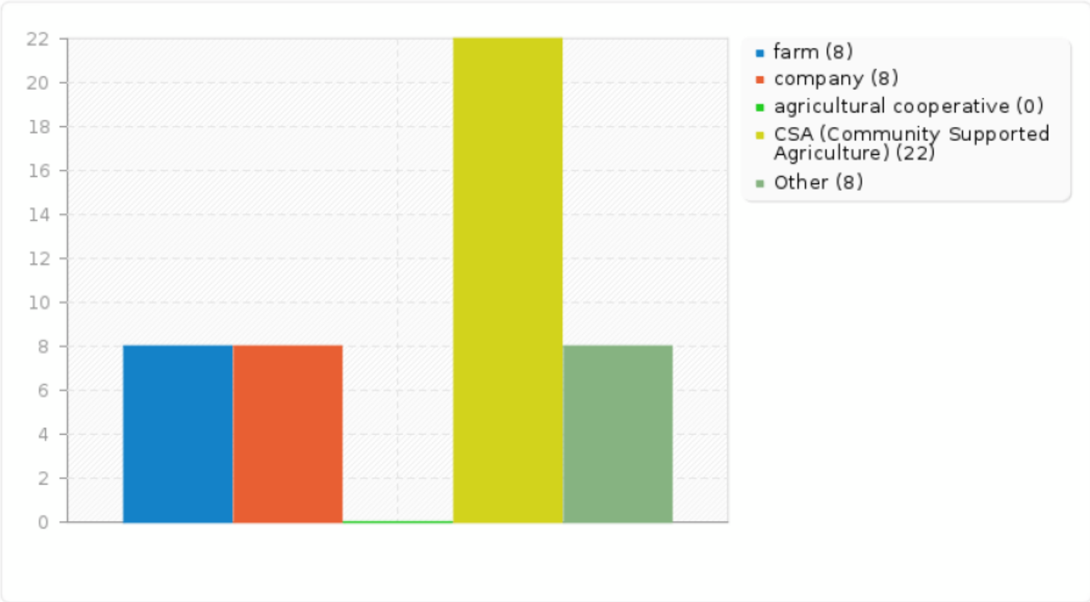
In which year did you start the box scheme?



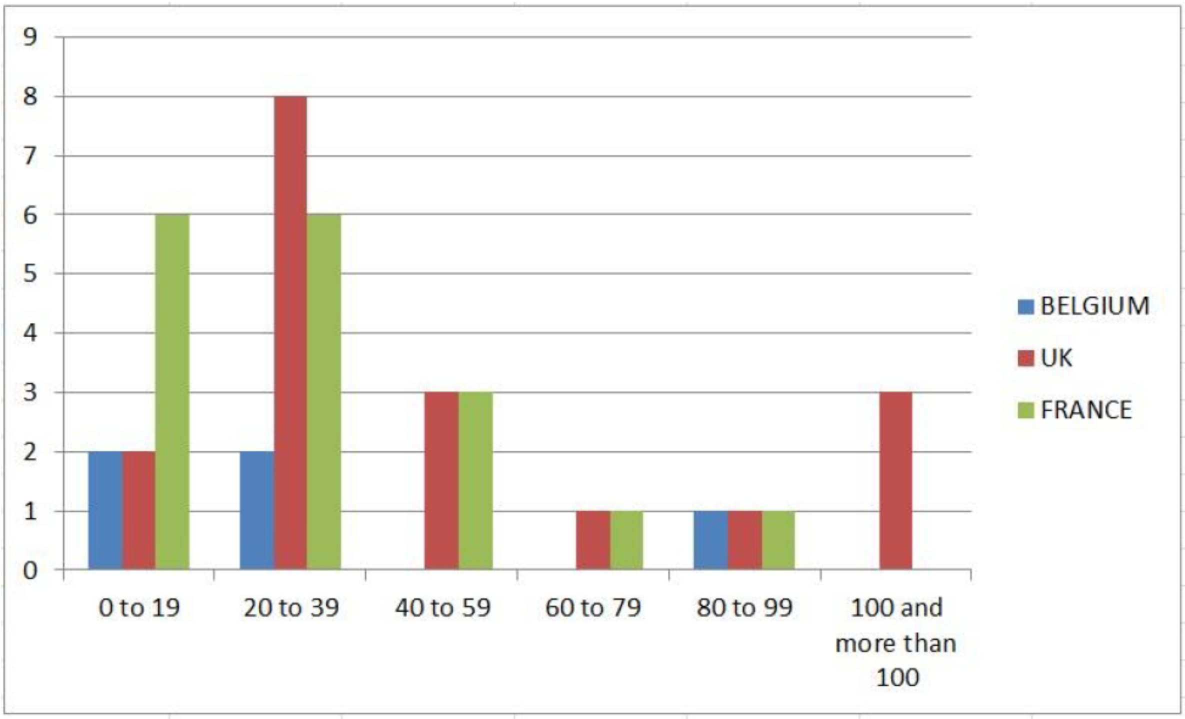
Please state number of employees (average of 2015):



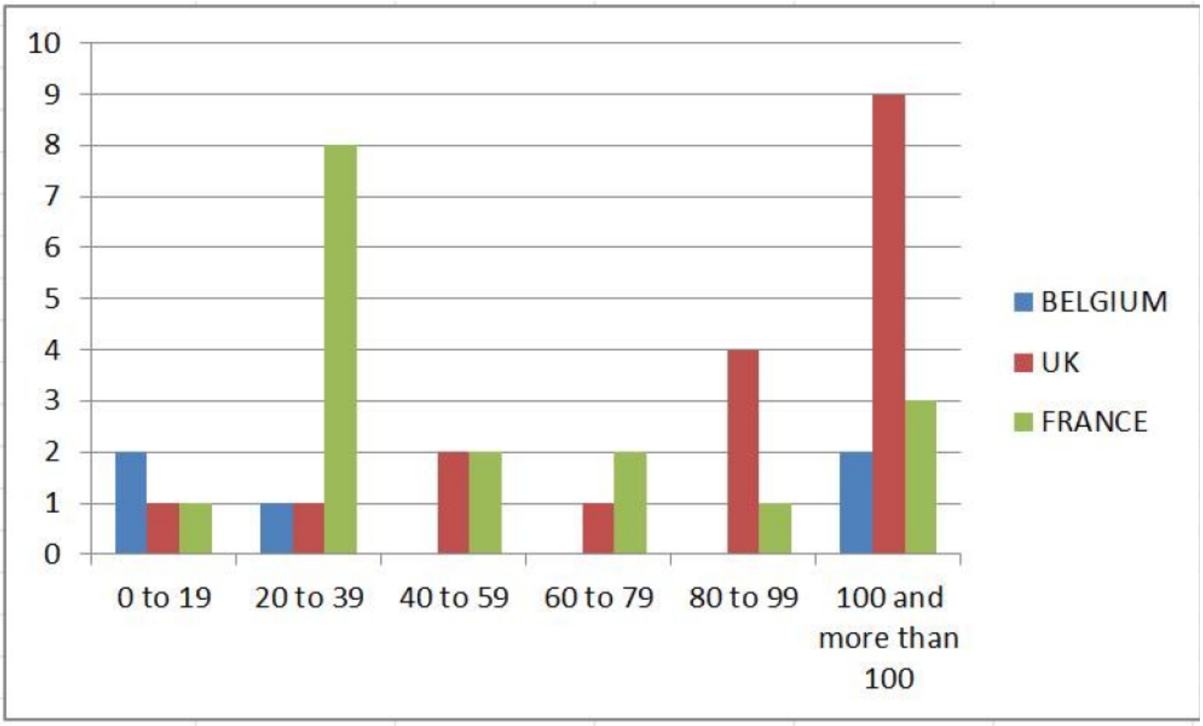
What is the organizational type of the box scheme?



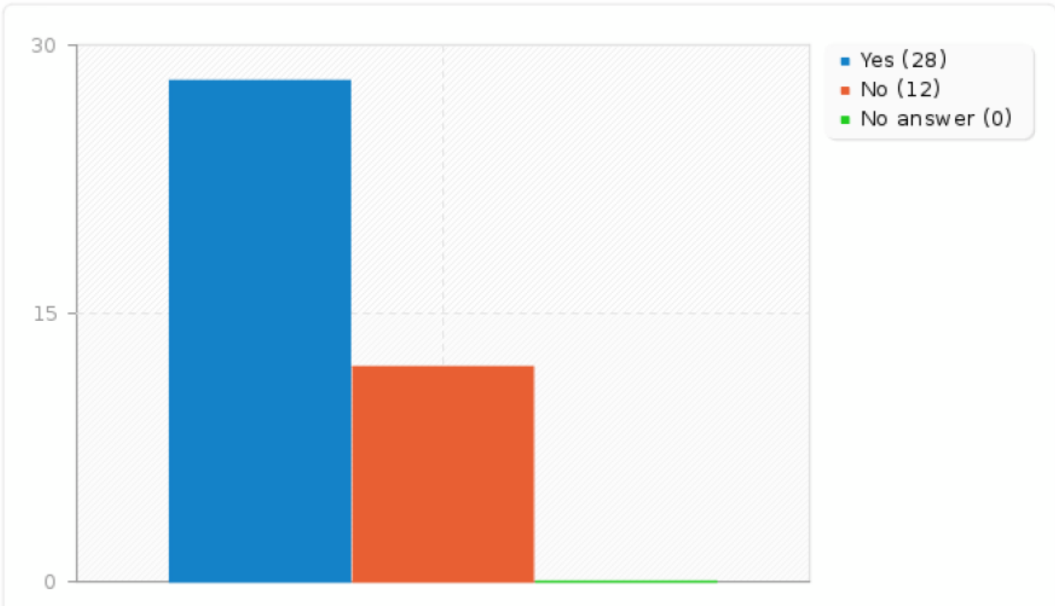
How many boxes did you sell in the first year? Please give us the average number of boxes per week in the first 12 month.



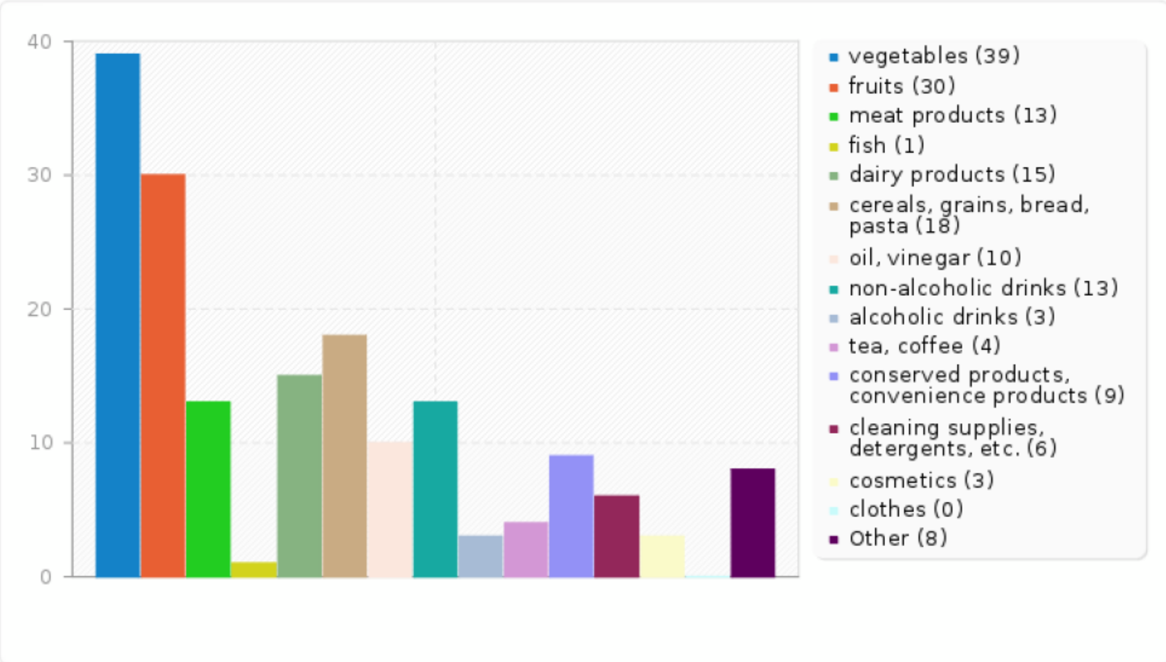
How many boxes did you sell last year (2015)? Please give us the average number of boxes per week in 2015.



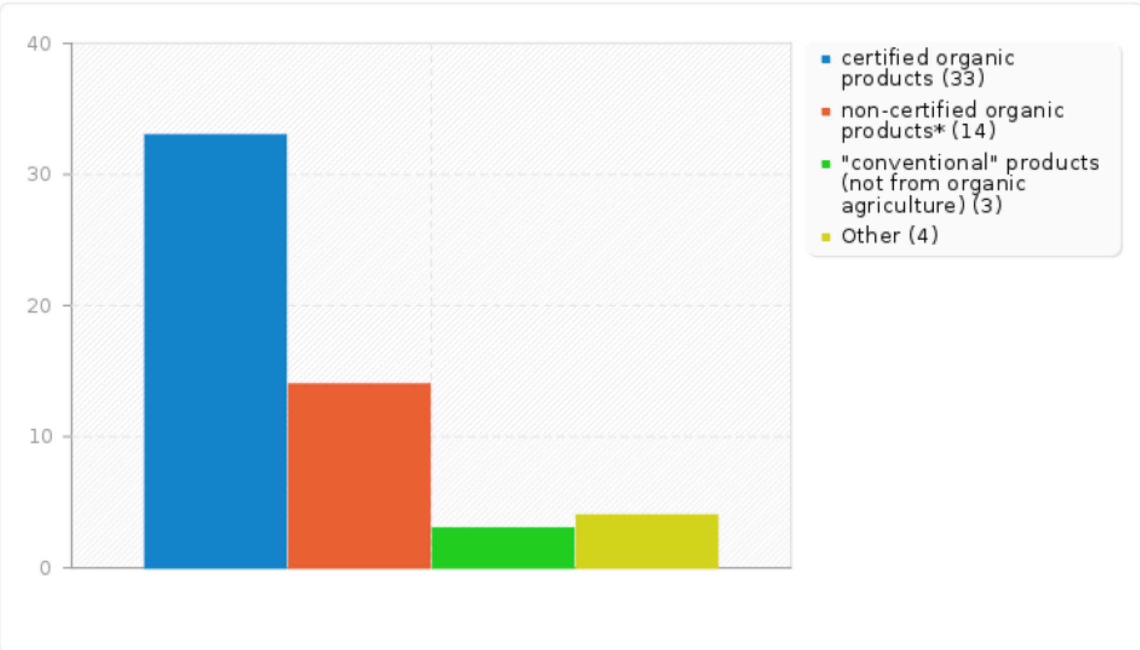
Would you like to (further) increase the number of boxes sold?



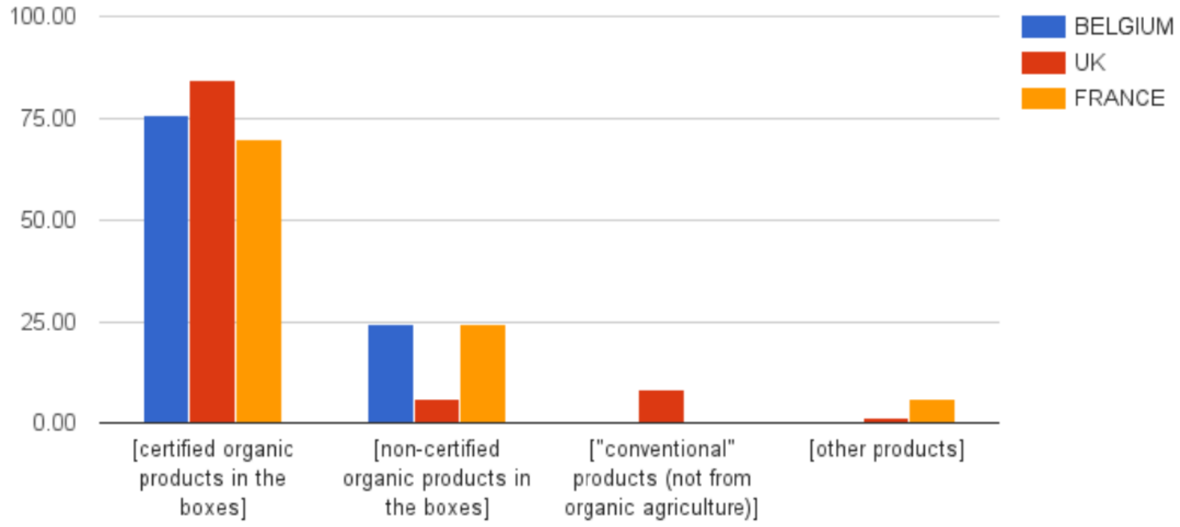
What products do you sell in the boxes?



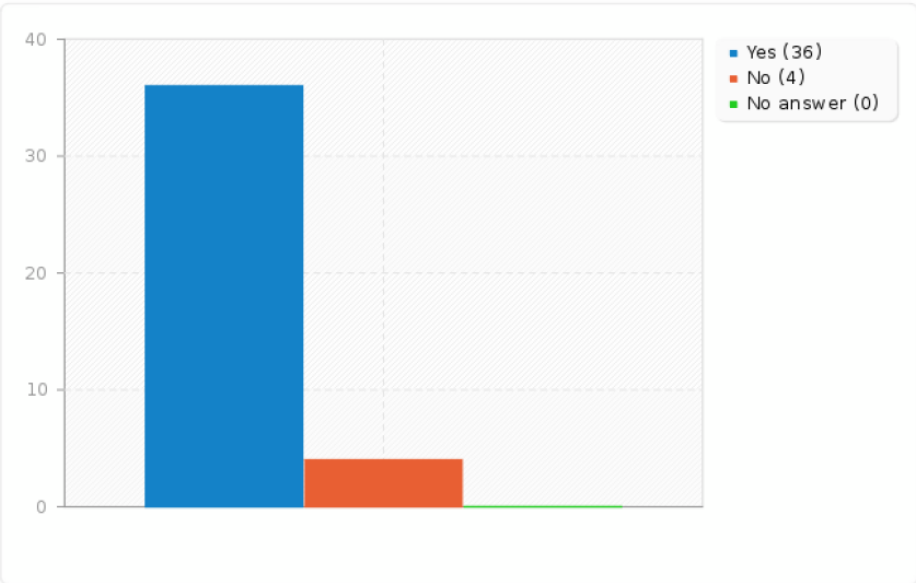
How are the products in the boxes produced?



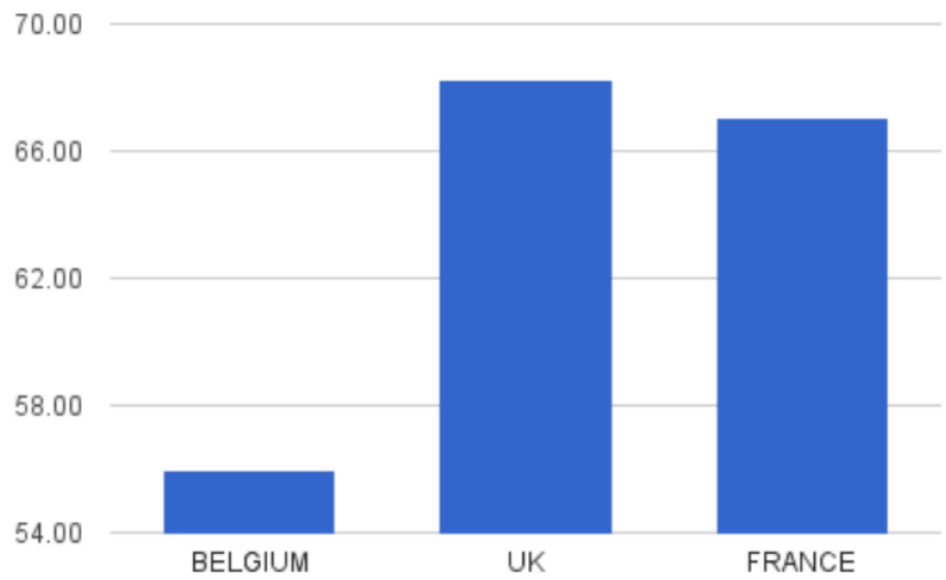
Please indicate the percentage of each of the product categories that you sell in the boxes:



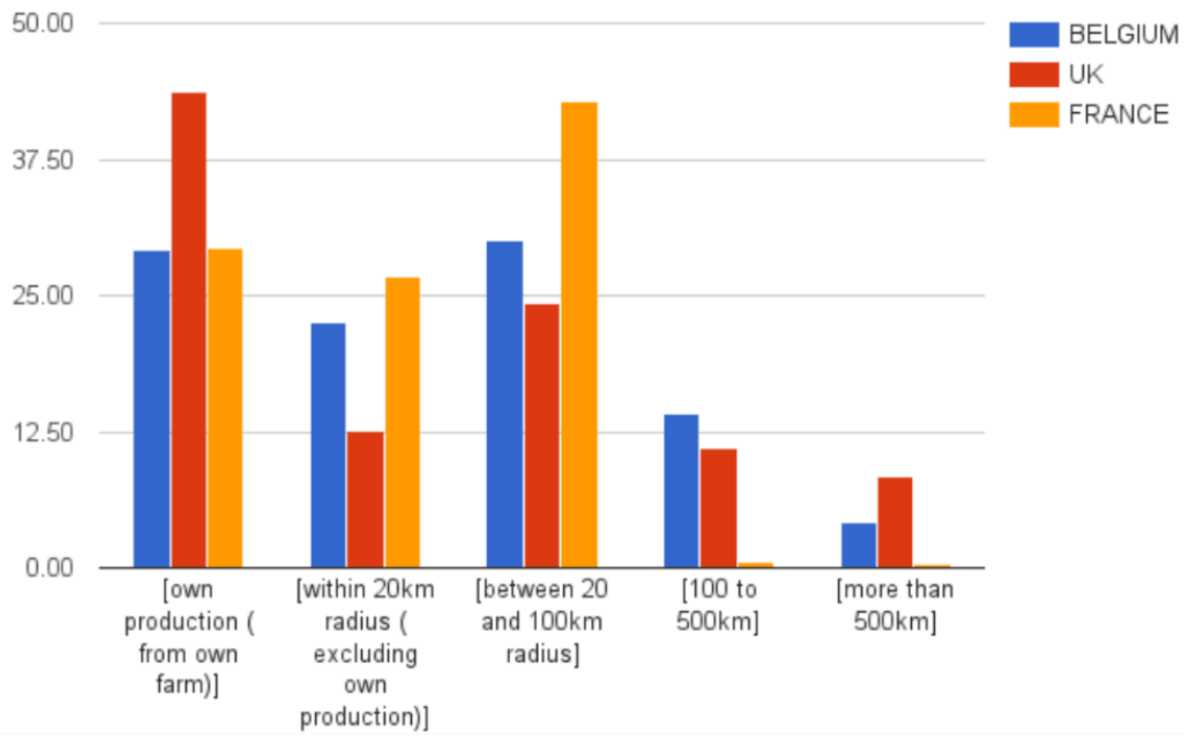
Do you sell local/regional products in your boxes?



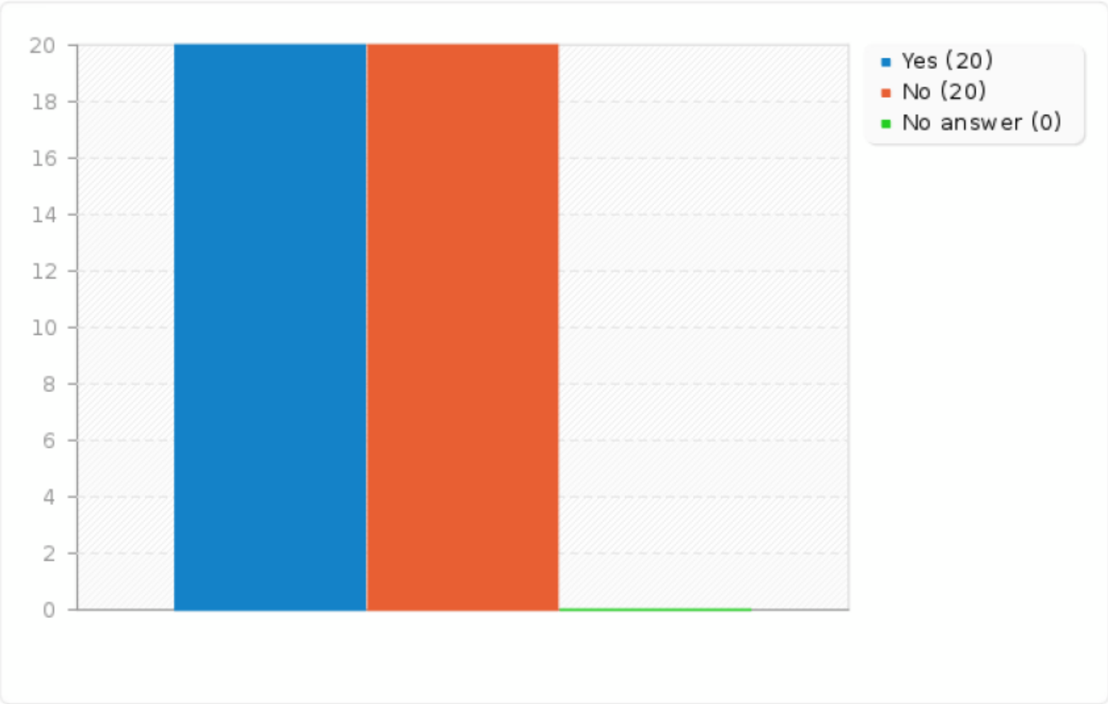
If you sell local/regional products please specify the maximum distance from your location that you consider as "local/regional" in km:



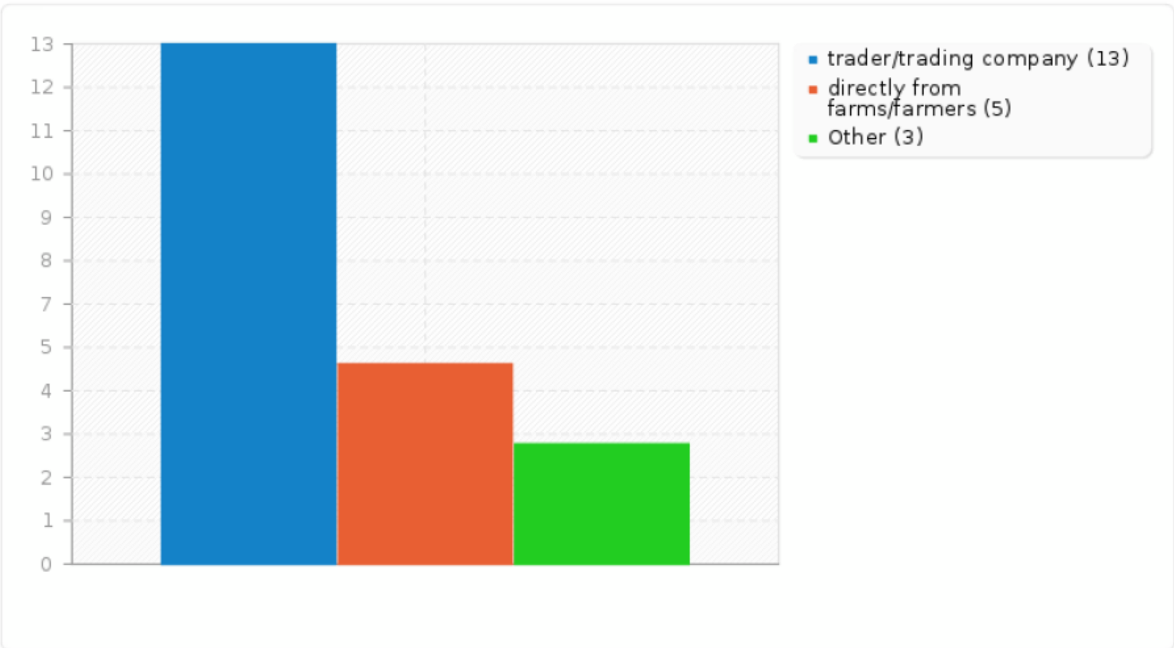
From what distance do your products come from? (estimated breakdown in %)



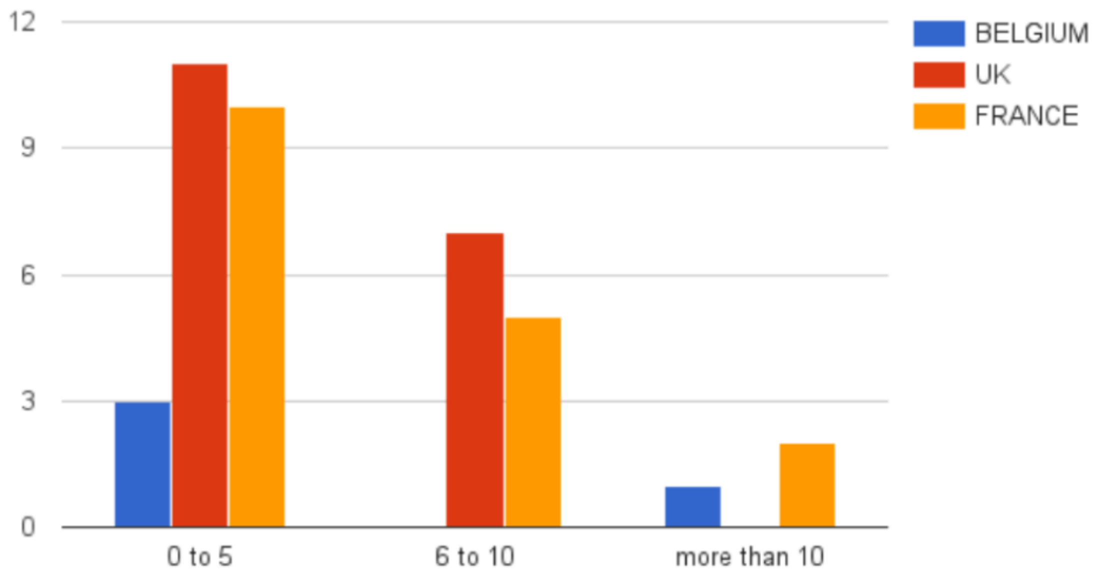
Do you also sell imported products in your boxes?



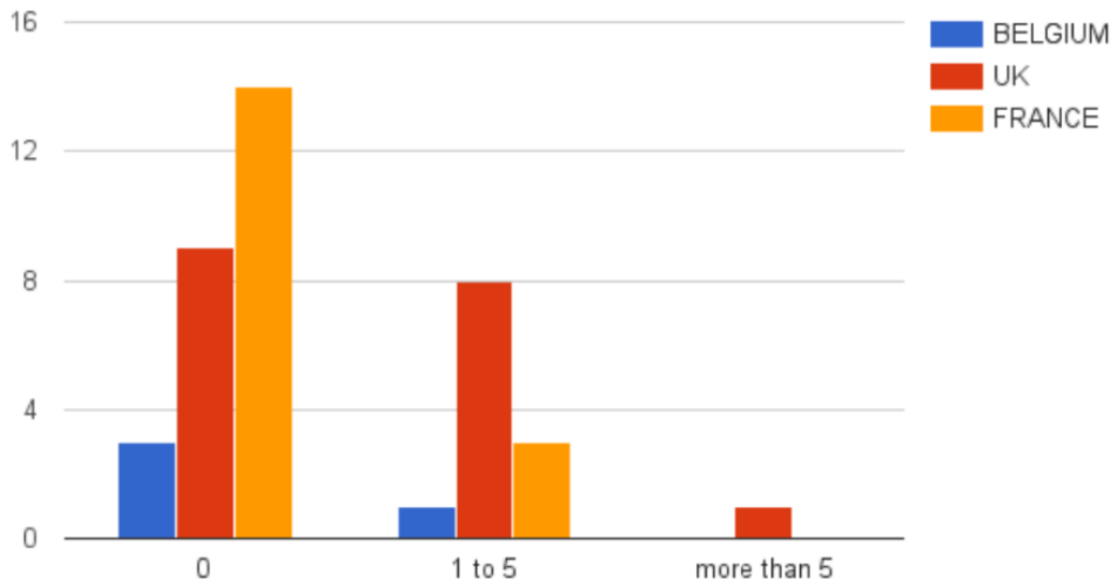
If you also sell imported products, from whom do you buy imported products?



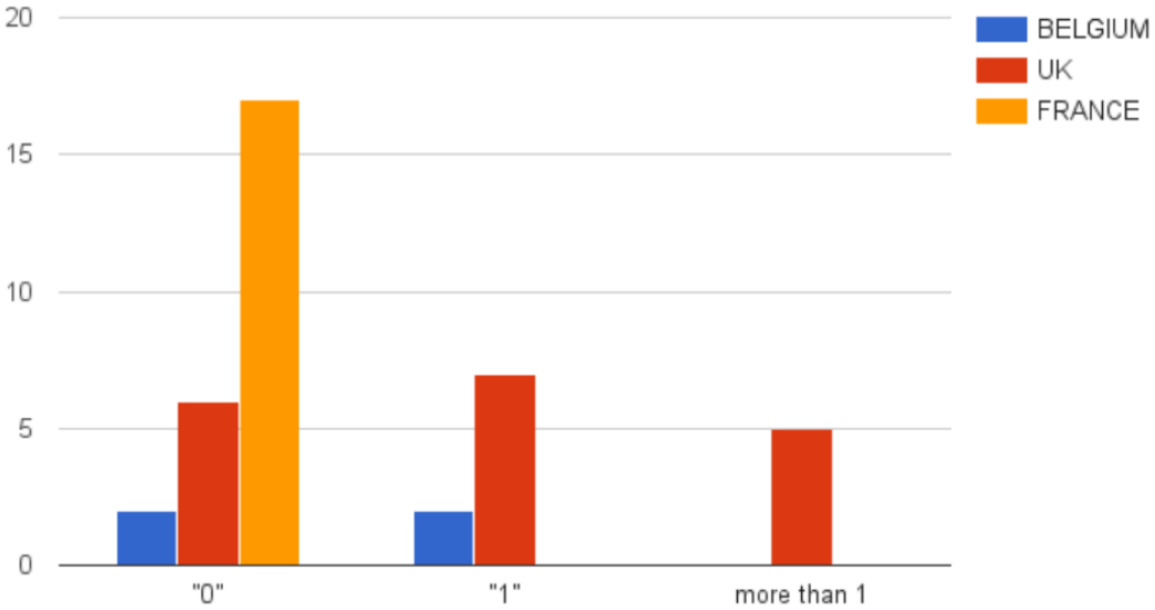
Please indicate the number of producers/farms that deliver produce to the box scheme:



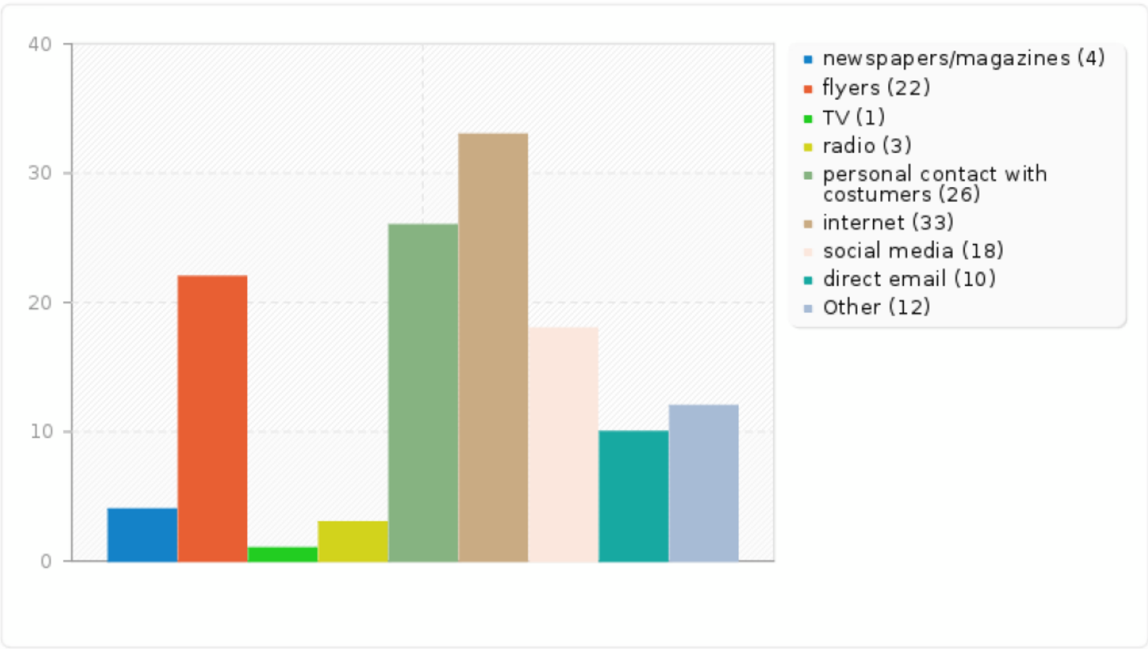
Please indicate the number of processors (e.g. bakeries, dairies) that deliver produce to the box scheme:



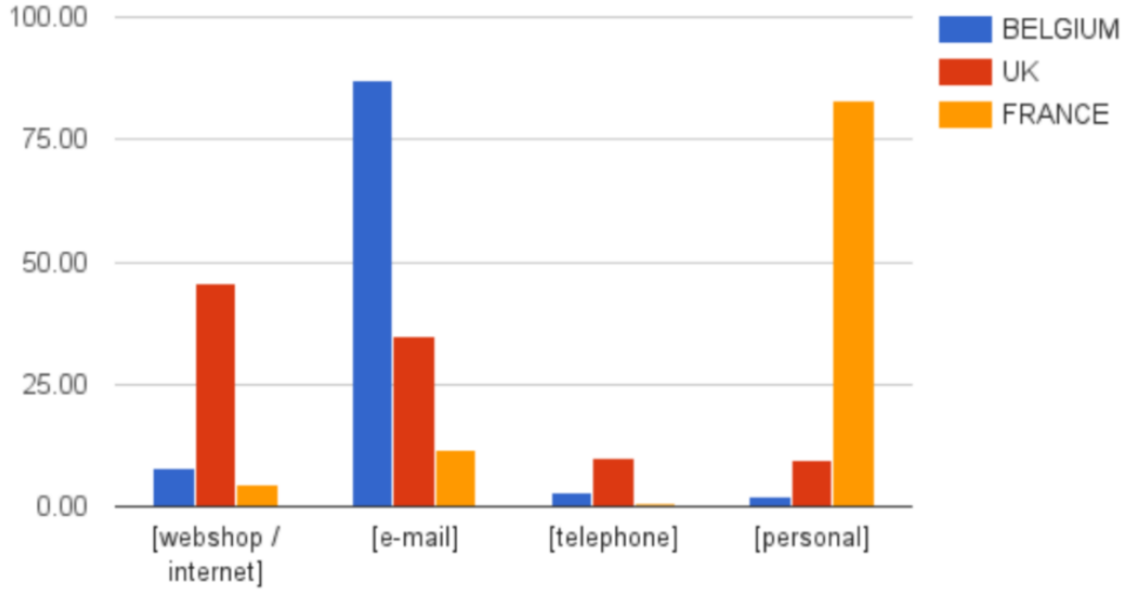
Please indicate the number of traders/trading companies that deliver produce to the box scheme:



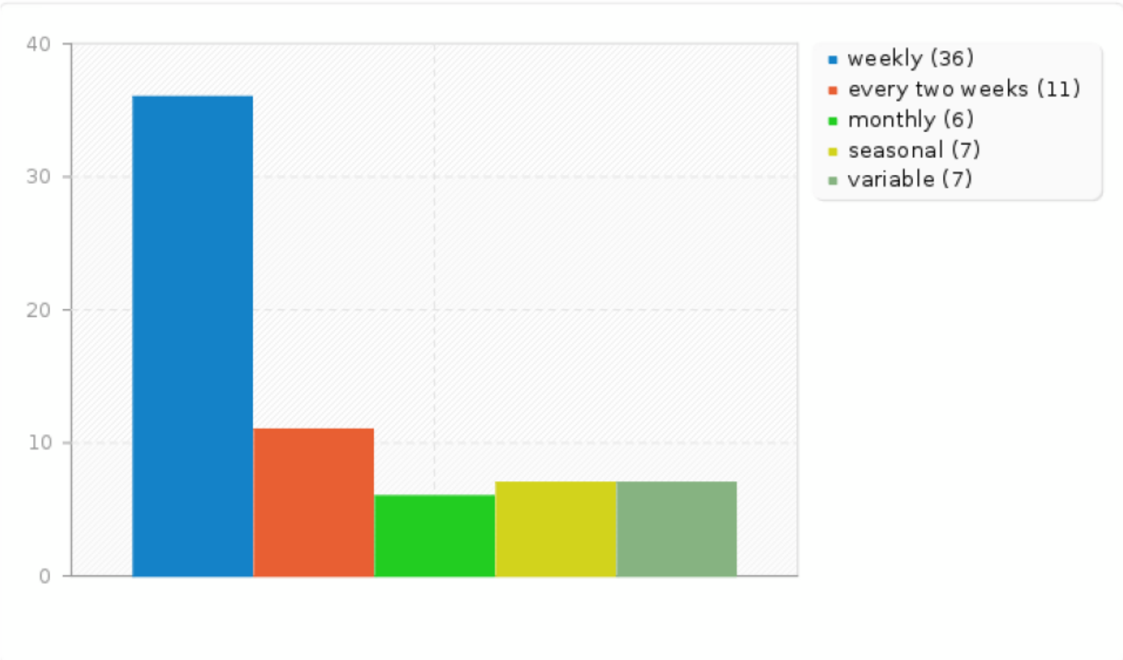
Which channels or media do you use for advertising?



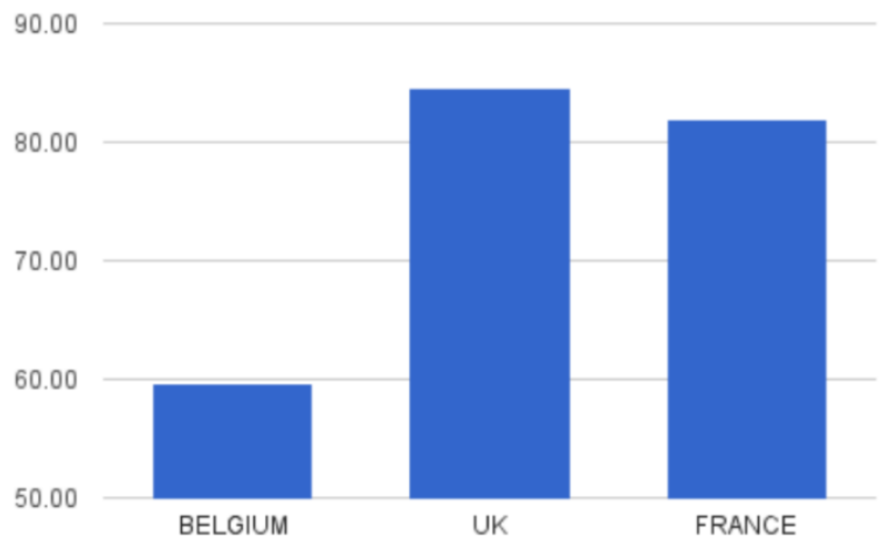
How do your clients order the boxes?



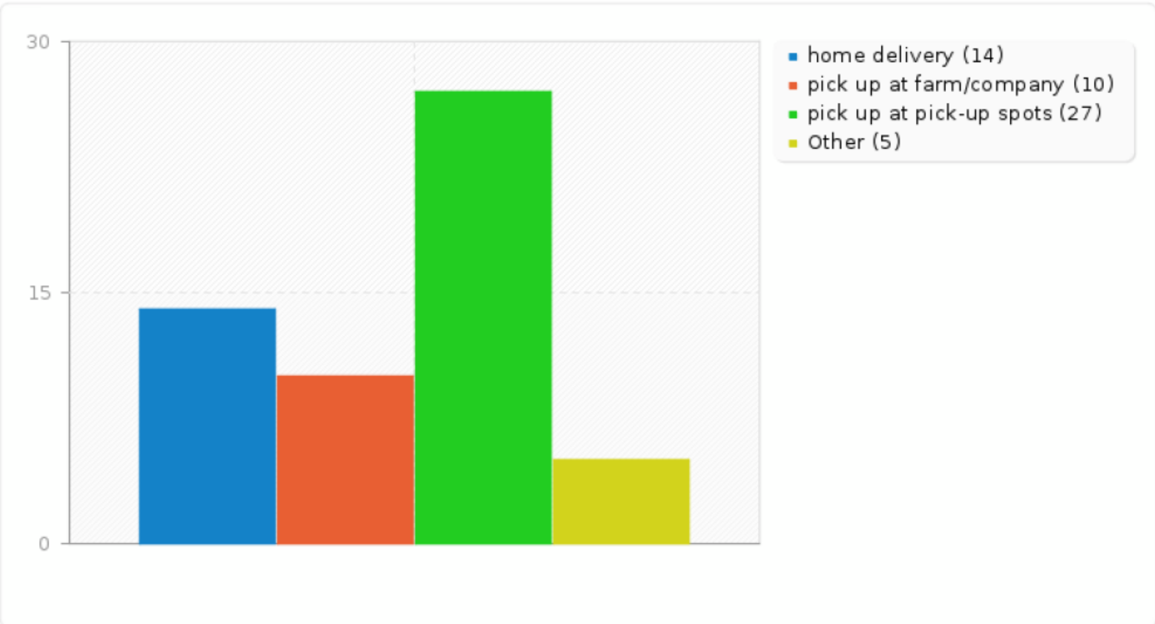
At what frequency do you deliver your boxes?



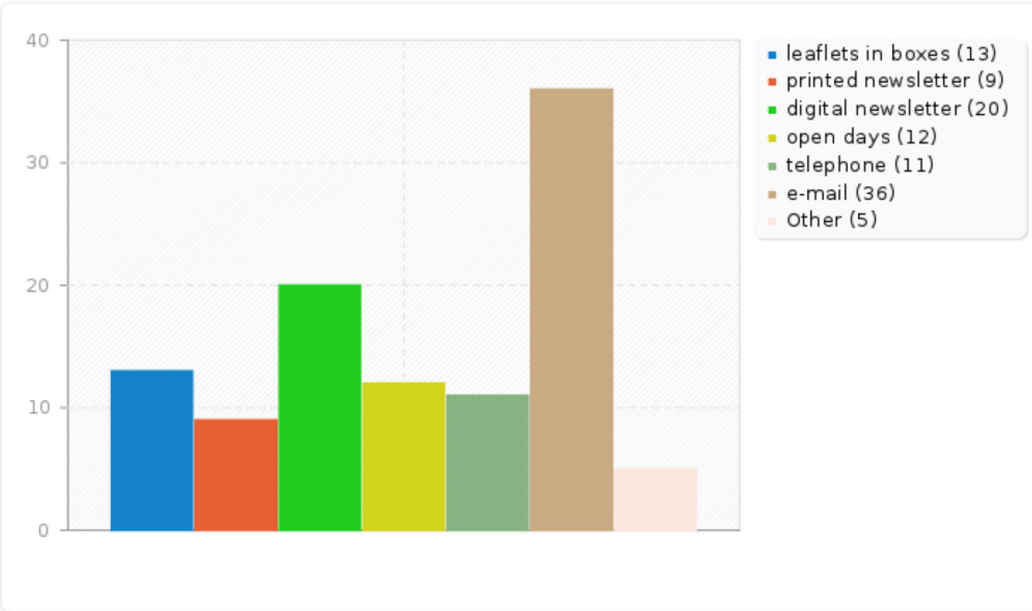
Please indicate the percentage of customers that order boxes regularly each week:



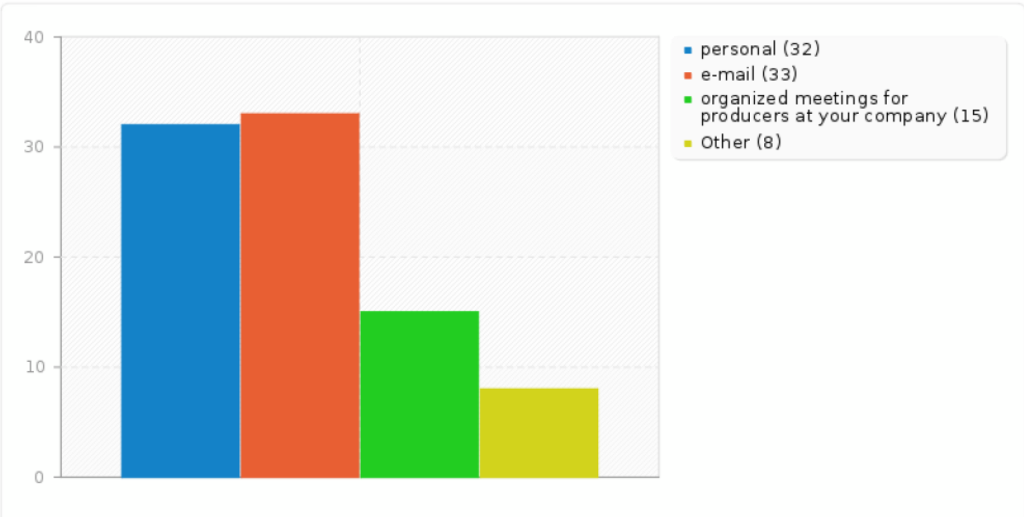
How do your clients receive their boxes?



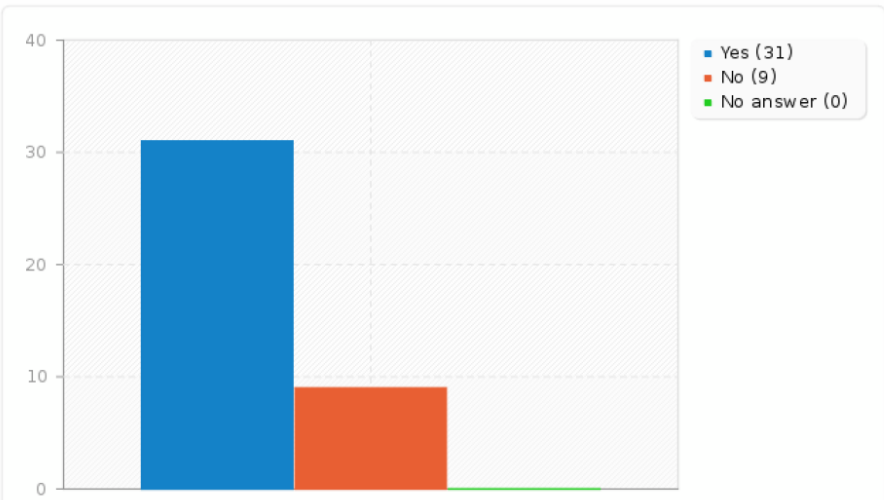
How do you communicate with your customers?



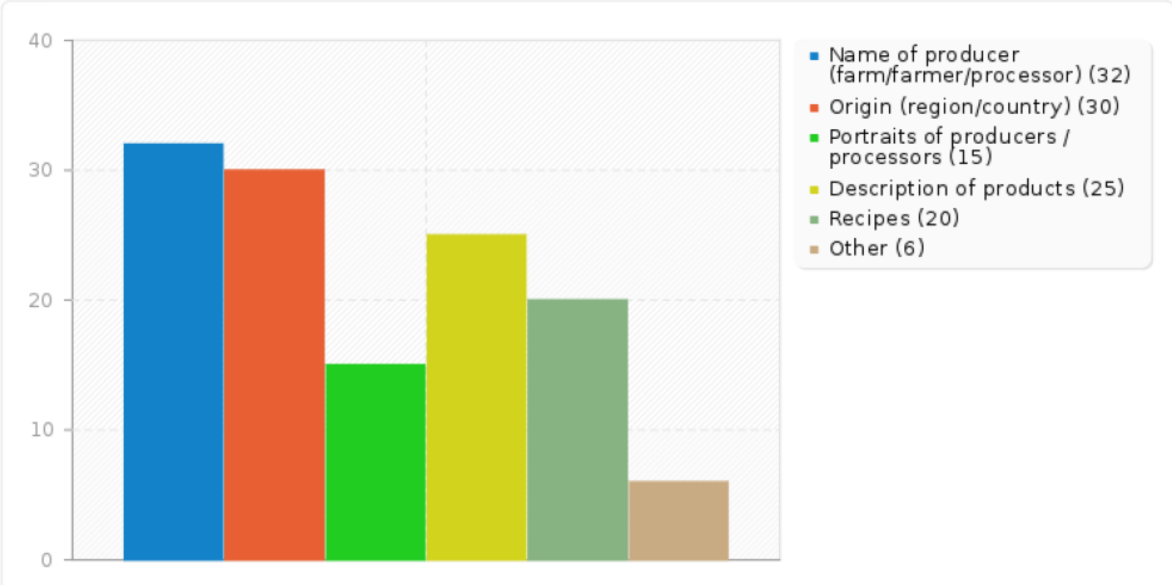
How do you communicate with your producers?



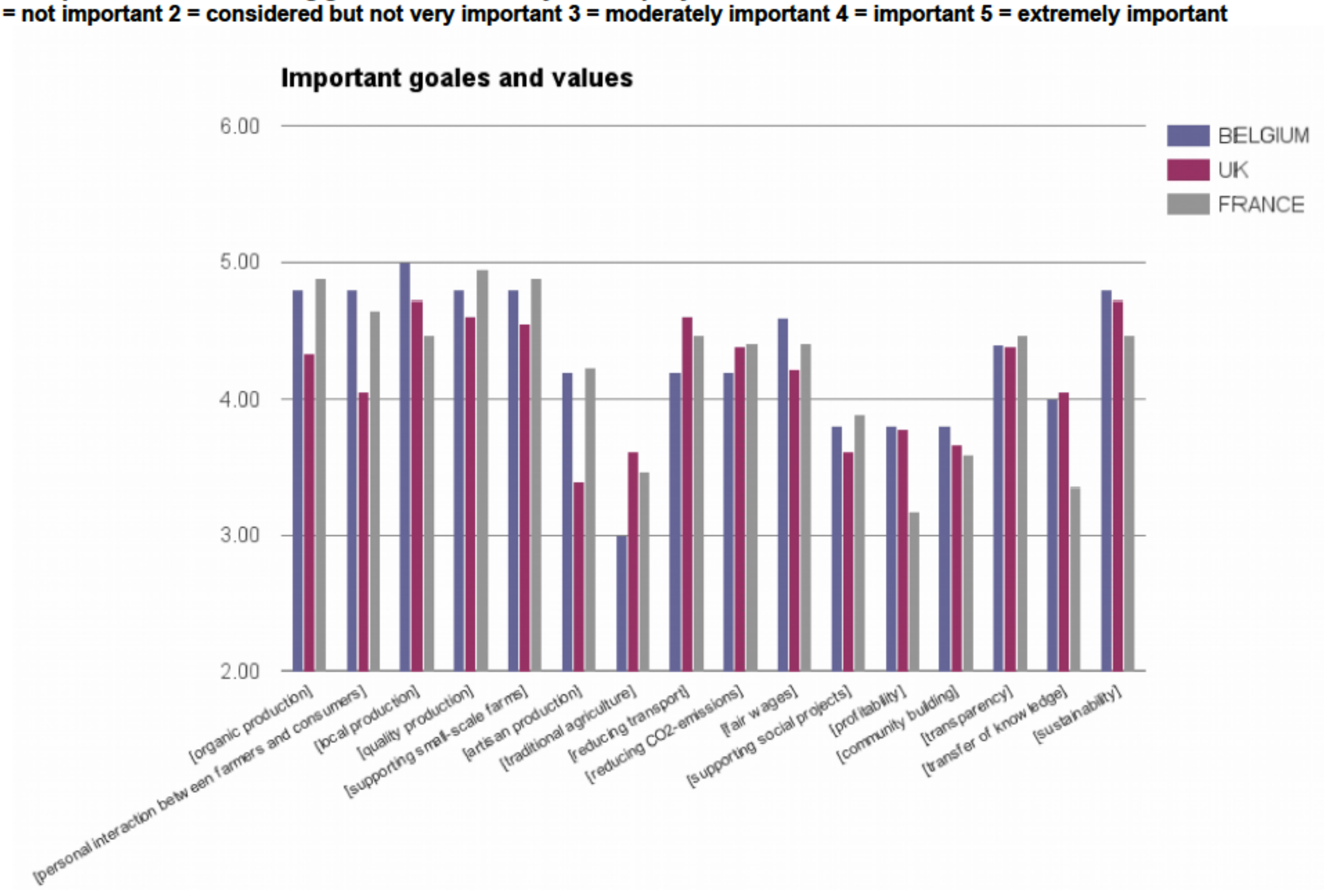
Do customers and producers of the box scheme have the opportunity to meet personally?



Please indicate which information you provide to your consumers about the products in he boxes.

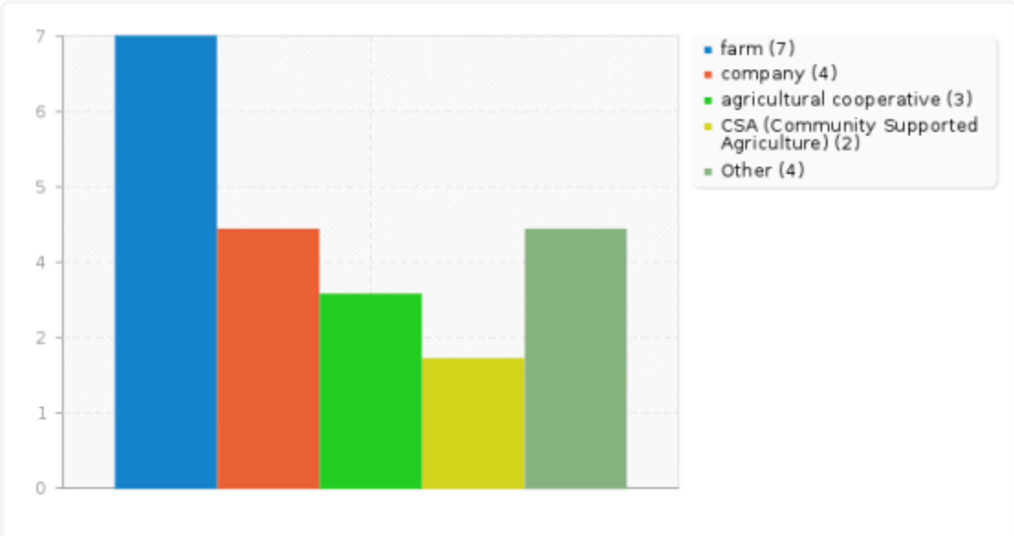


How important are the following goals and values for your company?
1 = not important 2 = considered but not very important 3 = moderately important 4 = important 5 = extremely important

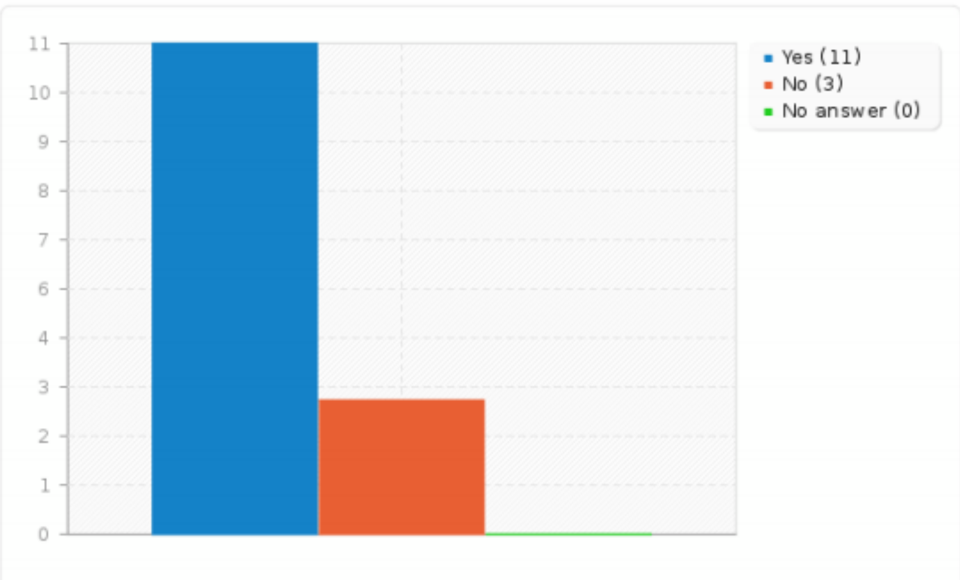


SURVEY RESULTS SOUTH EUROPE AND RUSSIA (n=14)

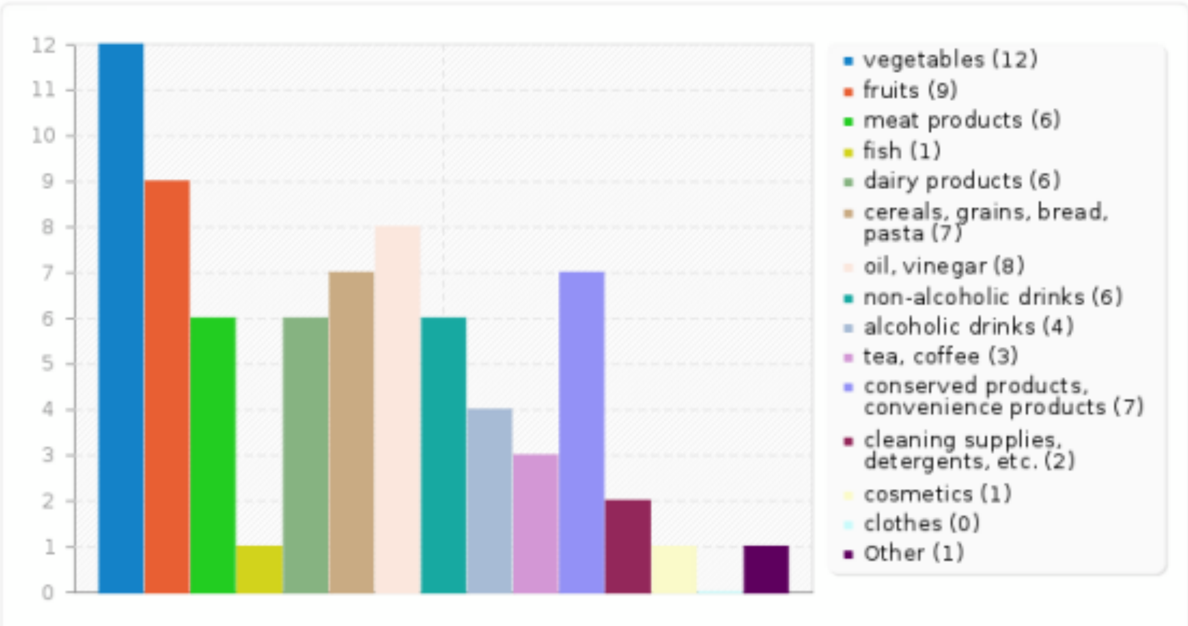
What is the organizational type of the box scheme?



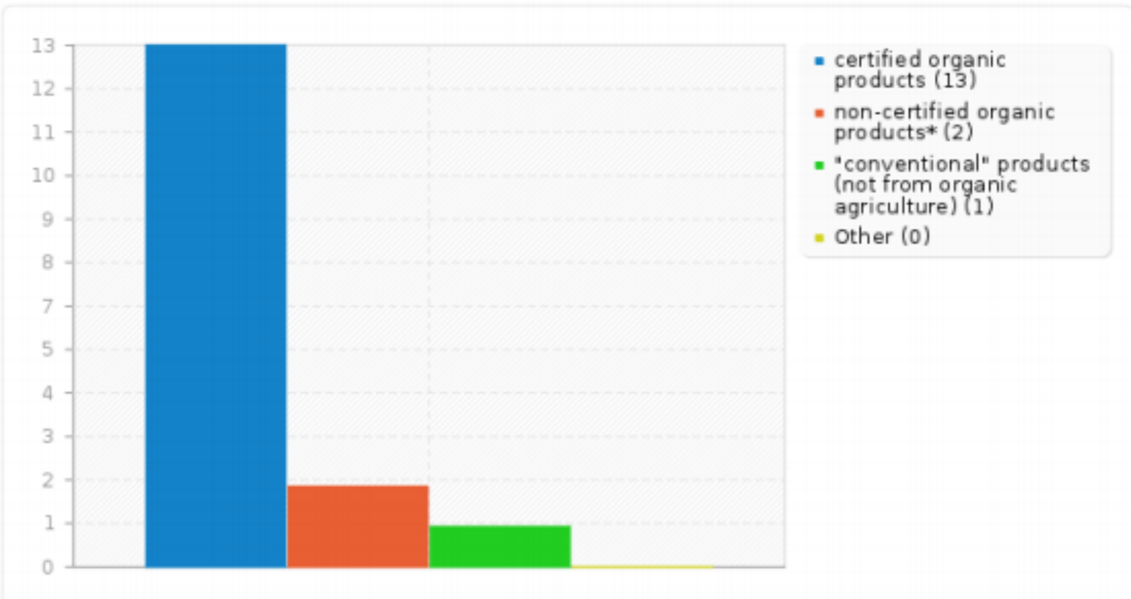
Would you like to (further) increase the number of boxes sold?



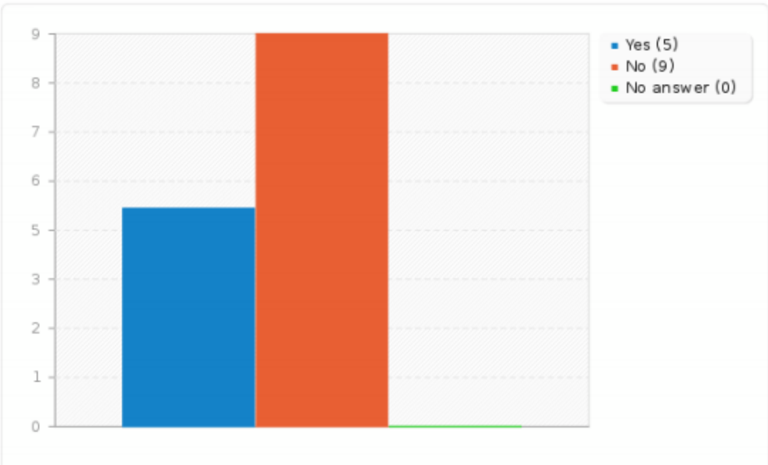
What products do you sell in the boxes?



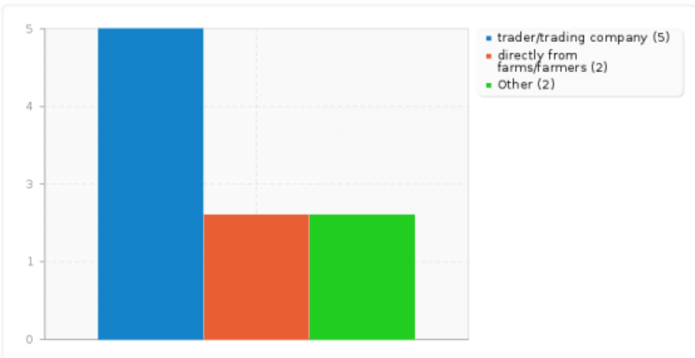
How are the products in the boxes produced?



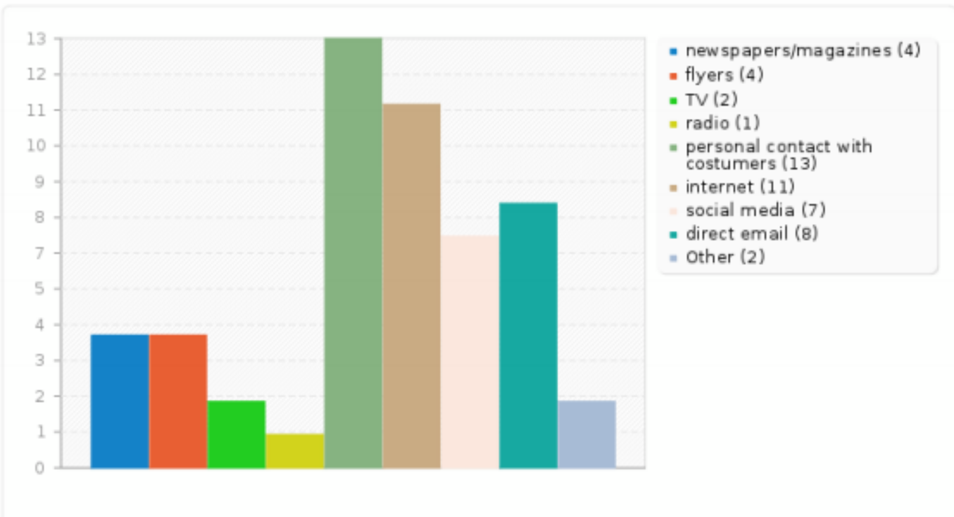
Do you also sell imported products in your boxes?



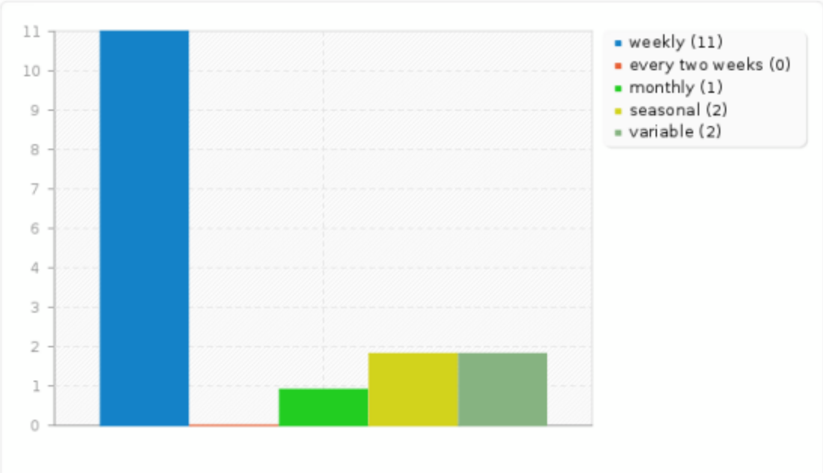
If you also sell imported products, from whom do you buy imported products?



Which channels or media do you use for advertising?

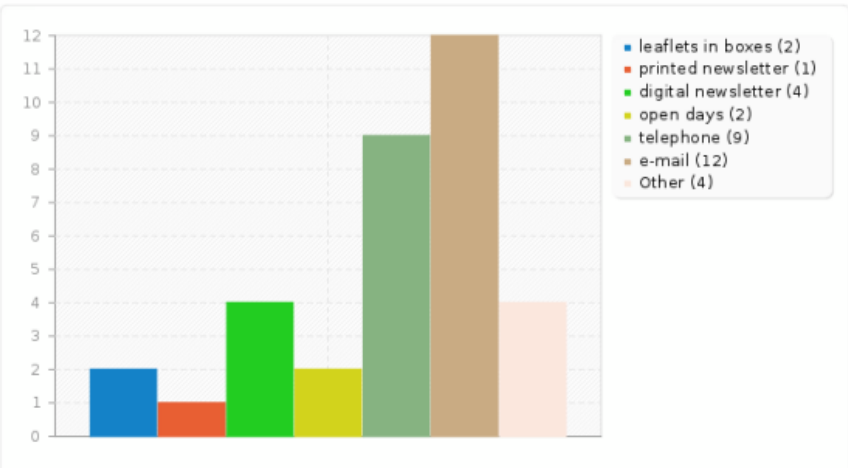


At what frequency do you deliver your boxes?

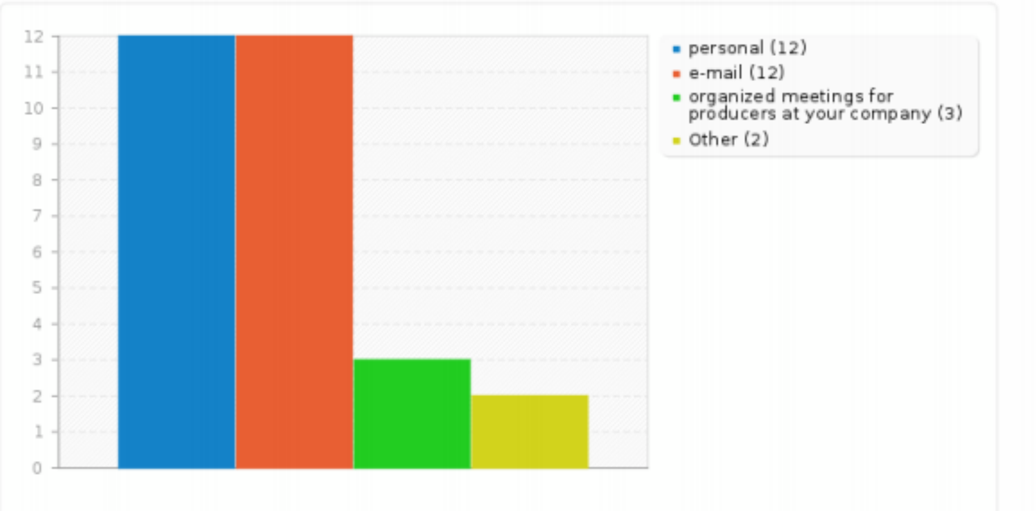


How do your clients receive their boxes?

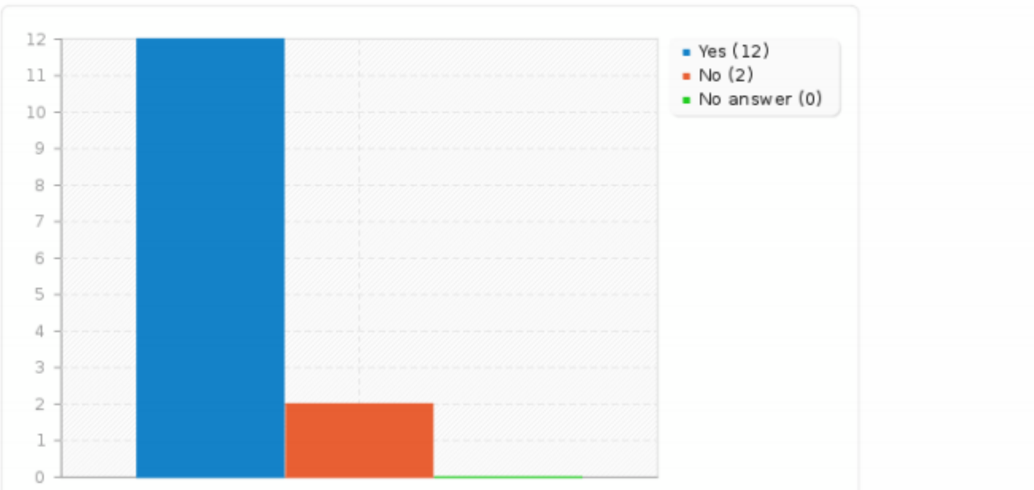
How do you communicate with your customers?



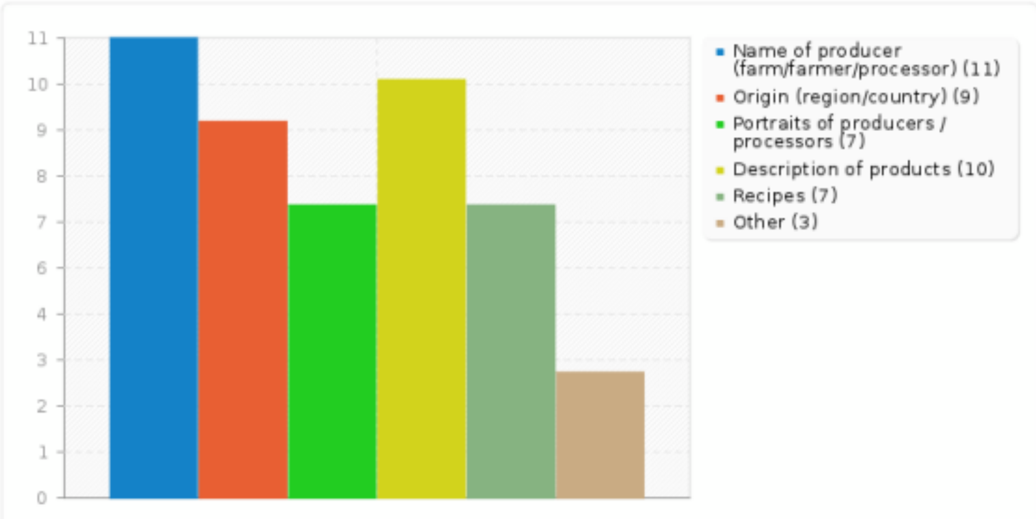
How do you communicate with your producers?



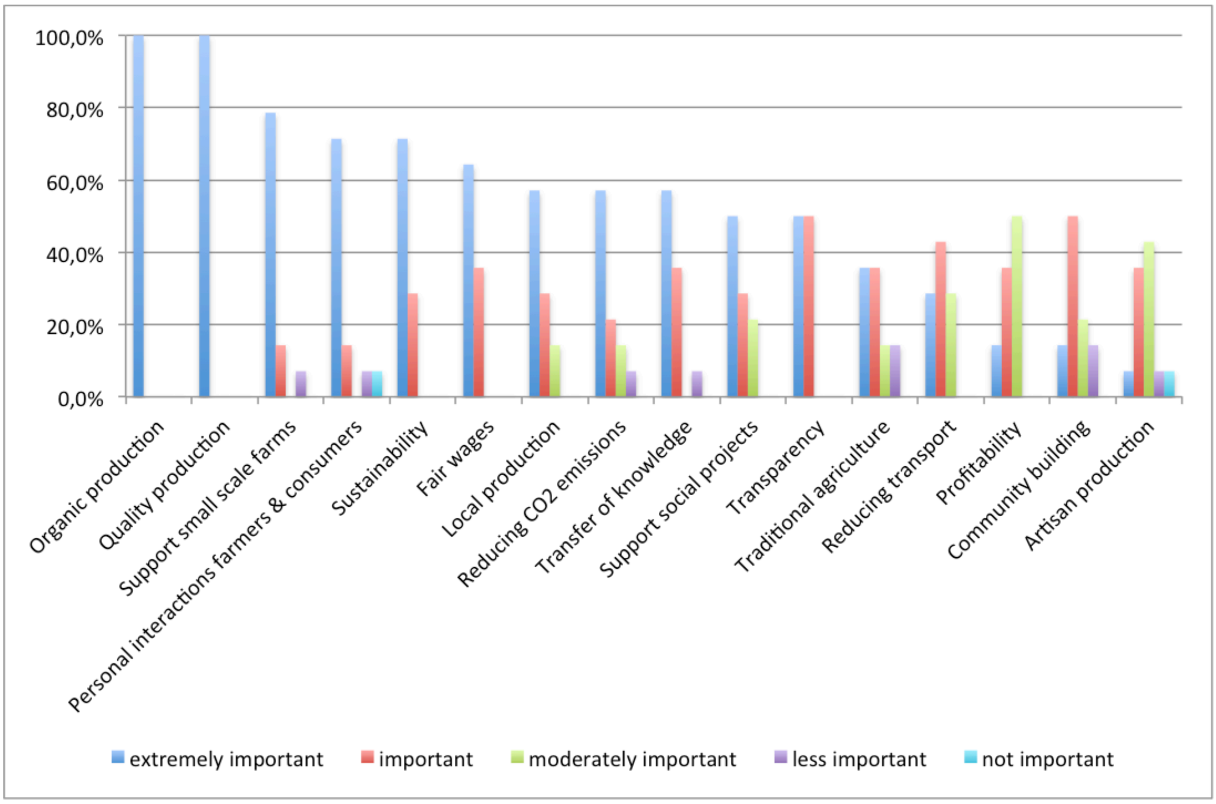
Do customers and producers of the box scheme have the opportunity to meet personally?



Please indicate which information you provide to your consumers about the products in the boxes.



How important are the following goals and values for your company?



SURVEY RESULTS CANADA, USA, AUSTRALIA (n=9)

Number of records in this query:	9
Total records in survey:	9
Percentage of total:	100,00%
Field summary for Startyear	
In which year did you start the box scheme? (Please enter year in format yyyy, e.g. 2010)	
Calculation	Result
Count	9
Minimum	1997
Maximum	2014

Field summary for number of employees		
Please state number of employees (average of 2015):		
Calculation	Result	
Count	9	
Sum	74	
Standard deviation	3,39	
Average	8,22	
Minimum	4	
1st quartile (Q1)	5	
2nd quartile (Median)	8	
3rd quartile (Q3)	10,5	
Maximum	15	
Null values are ignored in calculations		
Q1 and Q3 calculated using minitab method		
Field summary for organization form		
What is the organizational type of the box scheme?		
Answer	Count	Percentage
farm (SQ001)	0	0,00%
company (SQ002)	7	77,78%
agricultural cooperative (SQ003)	1	11,11%
CSA (Community Supported Agriculture) (SQ004)	0	0,00%
Other	1	11,11%

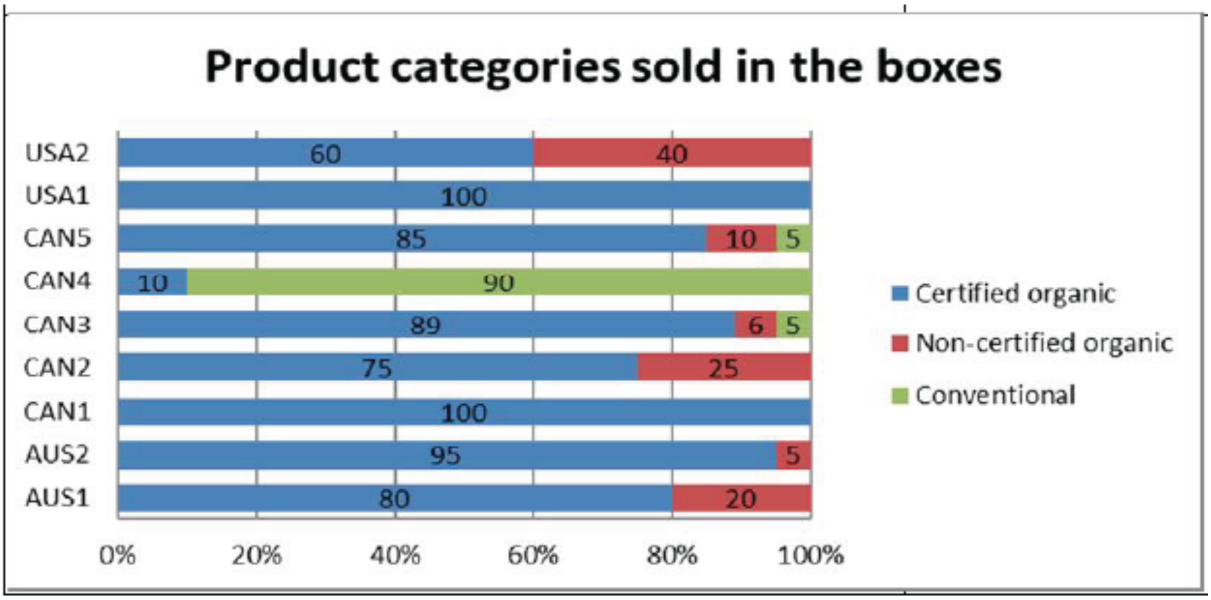
How many boxes did you sell in the first year? Please give us the average number of boxes per week in the first 12 month.		
Calculation	Result	
Count	9	
Sum	5420	
Standard deviation	1555,41	
Average	602,22	
Minimum	20	
1st quartile (Q1)	22,5	
2nd quartile (Median)	35	
3rd quartile (Q3)	125	
Maximum	5000	
Null values are ignored in calculations		
Q1 and Q3 calculated using minitab method		

How many boxes did you sell last year (2015)? Please give us the average number of boxes per week in 2015.		
Calculation	Result	
Count	9	
Sum	1792	
Standard deviation	153,87	
Average	199,11	
Minimum	55	
1st quartile (Q1)	71	
2nd quartile (Median)	140	
3rd quartile (Q3)	287,5	
Maximum	550	
Null values are ignored in calculations		
Q1 and Q3 calculated using minitab method		

Would you like to (further) increase the number of boxes sold?		
Answer	Count	Percentage
Yes (Y)	8	88,89%
No (N)	1	11,11%
No answer	0	0,00%
Field summary for why expand		
Please state why or why not you would like to increase the number of boxes sold:		
Answer	9	100,00%
No answer	0	0,00%

What products do you sell in the boxes?		
Answer	Count	Percentage
vegetables (SQ001)	8	88,89%
fruits (SQ009)	9	100,00%
meat products (SQ008)	2	22,22%
fish (SQ015)	1	11,11%
dairy products (SQ007)	7	77,78%
cereals, grains, bread, pasta (SQ006)	6	66,67%
oil, vinegar (SQ005)	3	33,33%
non-alcoholic drinks (SQ004)	4	44,44%
alcoholic drinks (SQ003)	1	11,11%
tea, coffee (SQ011)	7	77,78%
conserved products, convenience products (SQ010)	5	55,56%
cleaning supplies, detergents, etc. (SQ013)	1	11,11%
cosmetics (SQ014)	1	11,11%
clothes (SQ002)	0	0,00%
Other	4	44,44%

How are the products in the boxes produced?		
Answer	Count	Percentage
certified organic products (SQ001)	8	88,89%
non-certified organic products* (SQ002)	6	66,67%
"conventional" products (not from organic agriculture) (SQ006)	3	33,33%
Other	0	0,00%



Do you sell local/regional products in your boxes?		
Answer	Count	Percentage
Yes (Y)	9	100,00%
No (N)	0	0,00%
No answer	0	0,00%

<p>If you sell local/regional products please specify the maximum distance from your location that you consider as "local/regional" in km:	
Calculation	Result
Count	9
Sum	4450
Standard deviation	601,59
Average	494,44
Minimum	50
1st quartile (Q1)	75
2nd quartile (Median)	250
3rd quartile (Q3)	800
Maximum	2000

Do you also sell imported products in your boxes?		
Answer	Count	Percentage
Yes (Y)	6	66,67%
No (N)	3	33,33%
No answer	0	0,00%
Field summary for if import products		
If you also sell imported products, from whom do you buy imported products?		
Answer	Count	Percentage
trader/trading company (SQ001)	5	55,56%
directly from farms/farmers (SQ002)	0	0,00%
Other	1	11,11%

Please indicate the number of producers/farms that deliver produce to the box scheme:	
Calculation	Result
Count	8
Sum	86
Standard deviation	7,92
Average	10,75
Minimum	1
1st quartile (Q1)	3,75
2nd quartile (Median)	8
3rd quartile (Q3)	18,75
Maximum	25
Null values are ignored in calculations	
Q1 and Q3 calculated using minitab method	

Please indicate the number of processors (e.g. bakeries, dairies) that deliver produce to the box scheme:		
Calculation	Result	
Count	8	
Sum	42	
Standard deviation	4,52	
Average	5,25	
Minimum	0	
1st quartile (Q1)	0,75	
2nd quartile (Median)	5	
3rd quartile (Q3)	7,5	
Maximum	15	
Null values are ignored in calculations		
Q1 and Q3 calculated using minitab method		
Field summary for numbertraders		
Please indicate the number of traders/trading companies that deliver produce to the box scheme:		
Calculation	Result	
Count	8	
Sum	14	
Standard deviation	1,64	
Average	1,75	
Minimum	0	
1st quartile (Q1)	0,25	
2nd quartile (Median)	1	
3rd quartile (Q3)	3	
Maximum	5	
Null values are ignored in calculations		
Q1 and Q3 calculated using minitab method		

Field summary for advertising		
Which channels or media do you use for advertising?		
Answer	Count	Percentage
newspapers/magazines (SQ001)	1	11,11%
flyers (SQ007)	5	55,56%
TV (SQ006)	0	0,00%
radio (SQ005)	0	0,00%
personal contact with costumers (SQ004)	7	77,78%
internet (SQ003)	6	66,67%
social media (SQ002)	9	100,00%
direct email (SQ008)	4	44,44%
Other	2	22,22%

At what frequency do you deliver your boxes?		
Answer	Count	Percentage
weekly (SQ001)	9	100,00%
every two weeks (SQ002)	3	33,33%
monthly (SQ003)	2	22,22%
seasonal (SQ005)	0	0,00%
variable (SQ004)	2	22,22%

Please indicate the percentage of customers that order boxes regularly each week:	
Calculation	Result
Count	9%
Sum	570%
Standard deviation	27,39%
Average	63,33%
Minimum	10%
1st quartile (Q1)	40%
2nd quartile (Median)	75%
3rd quartile (Q3)	85%
Maximum	100%
Null values are ignored in calculations	
Q1 and Q3 calculated using minitab method	

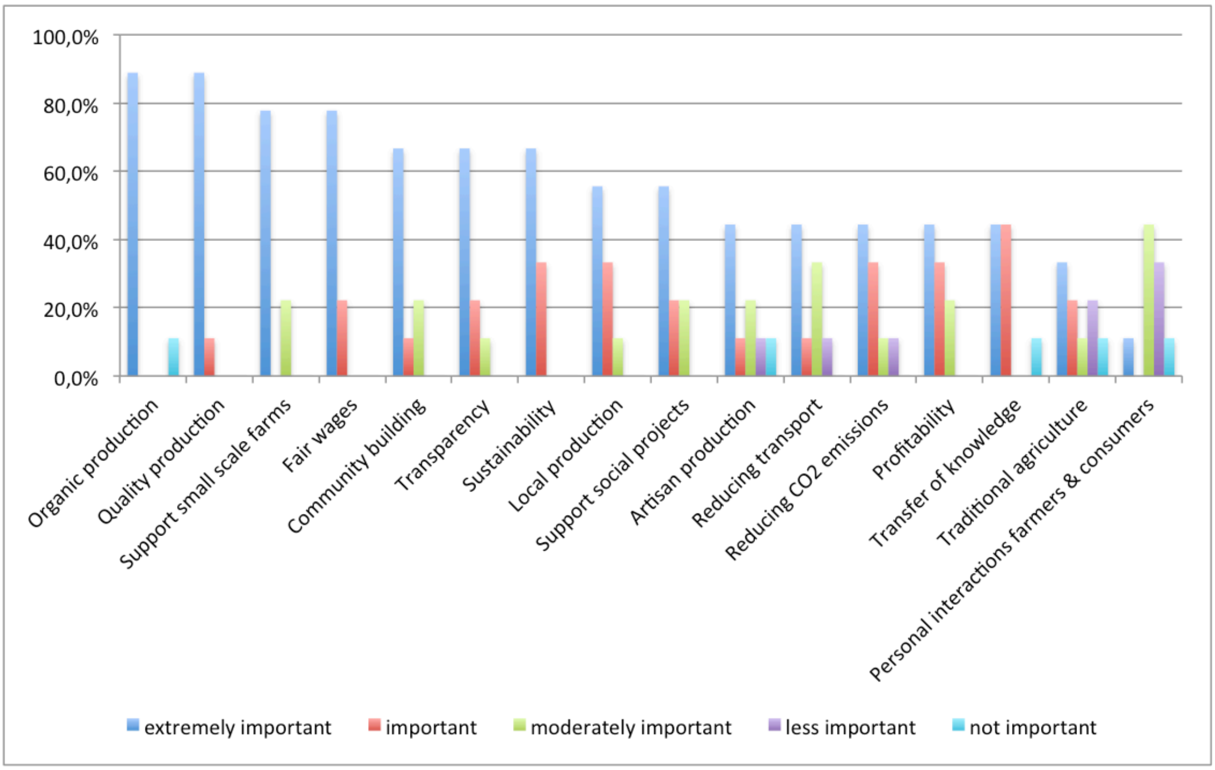
Field summary for delivery distance [average delivery distance, from main distribution centre to customer:]	
Please indicate your delivery distances:	
Calculation	Result
Count	8
Sum	200
Standard deviation	22,78
Average	25
Minimum	10
1st quartile (Q1)	10
2nd quartile (Median)	15
3rd quartile (Q3)	35
Maximum	80
Null values are ignored in calculations	
Q1 and Q3 calculated using minitab method	
Field summary for delivery distance [maximum delivery distance, from main distribution centre to customer:]	
Please indicate your delivery distances:	
Calculation	Result
Count	8
Sum	530
Standard deviation	36,81
Average	66,25
Minimum	30
1st quartile (Q1)	36,25
2nd quartile (Median)	55
3rd quartile (Q3)	83,75
Maximum	150
Null values are ignored in calculations	
Q1 and Q3 calculated using minitab method	

How do your clients receive their boxes?		
Answer	Count	Percentage
home delivery (SQ001)	8	88,89%
pick up at farm/company (SQ002)	2	22,22%
pick up at pick-up spots (SQ003)	1	11,11%
Other	1	11,11%
Field summary for communication methods with customers		
How do you communicate with your customers?		
Answer	Count	Percentage
leaflets in boxes (SQ001)	6	66,67%
printed newsletter (SQ002)	3	33,33%
digital newsletter (SQ003)	7	77,78%
open days (SQ004)	1	11,11%
telephone (SQ005)	4	44,44%
e-mail (SQ007)	9	100,00%
Other	2	22,22%

Field summary for communication methods with producers		
How do you communicate with your producers?		
Answer	Count	Percentage
personal (SQ001)	5	55,56%
e-mail (SQ002)	8	88,89%
organized meetings for producers at your company (SQ003)	2	22,22%
Other	3	33,33%
Field summary for consumers meeting producers		
Do customers and producers of the box scheme have the opportunity to meet personally?		
Answer	Count	Percentage
Yes (Y)	6	66,67%
No (N)	3	33,33%
No answer	0	0,00%

Please indicate which information you provide to your consumers about the products in the boxes.		
Answer	Count	Percentage
Name of producer (farm/farmer/processor) (SQ001)	7	77,78%
Origin (region/country) (SQ002)	8	88,89%
Portraits of producers / processors (SQ003)	5	55,56%
Description of products (SQ005)	8	88,89%
Recipes (SQ004)	8	88,89%
Other	1	11,11%

How important are the following goals and values for your company?



Universität für Bodenkultur Wien

Survey on organic box schemes (North America)

Welcome to the survey on organic box schemes!
We are interested in the current state, and future growth of, organic box schemes throughout the world, as well as the potential for organic box schemes to further increase organic production and consumption.
The questionnaire will take about 15 minutes to answer, and we thank you for your valuable time and information.
This survey is embedded in a student seminar at the University of Natural Resources and Life Sciences, Vienna. Contact information will be provided at the end of the survey.

There are 35 questions in this survey.

A note on privacy
This survey is anonymous.
The record of your survey responses does not contain any identifying information about you, unless a specific survey question explicitly asked for it. If you used an identifying token to access this survey, please rest assured that this token will not be stored together with your responses. It is managed in a separate database and will only be updated to indicate whether you did (or did not) complete this survey. There is no way of matching identification tokens with survey responses.

General information

*** *1* Please state the name of your box scheme system:**

*** *2***
Please state the address of your box scheme, including location and country (e.g. Vienna, Austria):

*** *3* In which year did you start the box scheme? (Please enter year in format yyyy, e.g. 2010)**
Only numbers may be entered in this field.

*** *4* Please state number of employees (average of 2015):**
Only numbers may be entered in this field.

*** *5***
What is the organizational type of the box scheme?

Check any that apply

- ☐ farm
- ☐ company
- ☐ agricultural cooperative
- ☐ CSA (Community Supported Agriculture)
- ☐ Other:

Size and growth

* *6*
How many boxes did you sell in the first year? Please give us the average number of boxes per week in the first 12 month.

Only numbers may be entered in this field.

* *7*
How many boxes did you sell last year (2015)? Please give us the average number of boxes per week in 2015.

Only numbers may be entered in this field.

* *8* Would you like to (further) increase the number of boxes sold?

○ Yes ○ No

9 Please state why or why not you would like to increase the number of boxes sold:

Products in the boxes

* **10 What products do you sell in the boxes?**

- ☐ vegetables
- ☐ fruits
- ☐ meat products
- ☐ fish
- ☐ dairy products
- ☐ cereals, grains, bread, pasta
- ☐ oil, vinegar
- ☐ non-alcoholic drinks
- ☐ alcoholic drinks
- ☐ tea, coffee
- ☐ conserved products, convenience products
- ☐ cleaning supplies, detergents, etc.
- ☐ cosmetics
- ☐ clothes
- ☐ Other: ______

* **11 How are the products in the boxes produced?**

- ☐ certified organic products
- ☐ non-certified organic products*
- ☐ "conventional" products (not from organic agriculture)
- ☐ Other: ______

? * "Non-certified organic": producer claims to work according to organic principles, but is not officially certified.

* **12**
Please indicate the percentage of each of the product categories that you sell in the boxes:

Only numbers may be entered in these fields.
The sum must equal 100.

percentage of certified organic products in the boxes	____ %
percentage of non-certified organic products in the boxes	____ %
percentage of "conventional" products (not from organic agriculture)	____ %
percentage of other products	____ %
Remaining:	**100 %**
Total:	**0 %**

? Note: Numbers have to be entered in each field. Please insert 0 if category does not apply.

* **13 Do you sell local/regional products in your boxes?**

◯ Yes ◯ No

* **14**
If you sell local/regional products please specify the maximum distance from your location that you consider as "local/regional" in km:

Only numbers may be entered in this field.

____ km

* **15**
From what distance do your products come from? (estimated breakdown in %)

Only numbers may be entered in these fields.
The sum must equal 100.

own production (from own farm)	____ %
within 20km radius (excluding own production)	____ %
between 20 and 100km radius	____ %
100 to 500km	____ %
more than 500km	____ %
Remaining:	**100 %**
Total:	**0 %**

? Note: Numbers have to be entered in each field. Please insert 0 if category does nor apply.

* **16 Do you also sell imported products in your boxes?**

- Yes
- No

17 If you also sell imported products, from whom do you buy imported products?

- trader/trading company
- directly from farms/farmers
- from others (please specify):

Producers / partners

18 Please indicate the number of producers/farms that deliver produce to the box scheme:
Only numbers may be entered in this field.

19 Please indicate the number of processors (e.g. bakeries, dairies) that deliver produce to the box scheme:
Only numbers may be entered in this field.

20 Please indicate the number of traders/trading companies that deliver produce to the box scheme:
Only numbers may be entered in this field.

Advertising

* **21 Which channels or media do you use for advertising?**
Check any that apply

- newspapers/magazines
- flyers
- TV
- radio
- personal contact with costumers
- internet
- social media
- direct email
- Other:

Ordering and delivery

* *22*
How do your clients order the boxes?

Only numbers may be entered in these fields.
The sum must equal 100.

webshop / internet	%
e-mail	%
telephone	%
personal	%
Remaining:	**100 %**
Total:	**0 %**

Note: Numbers have to be entered in each field. Please insert 0 if category does nor apply.

* ***23* At what frequency do you deliver your boxes?**

- weekly
- every two weeks
- monthly
- seasonal
- variable

* ***24* Please indicate the percentage of customers that order boxes regularly each week:**
Only numbers may be entered in this field.

%

25
Please indicate your delivery distances:

Only numbers may be entered in these fields.

average delivery distance, from main distribution centre to customer: km
maximum delivery distance, from main distribution centre to customer: km

* ***26* How do your clients receive their boxes?**

- home delivery
- pick up at farm/company
- pick up at pick-up spots
- Other:

Communication

*** 27 How do you communicate with your customers?**

- ☐ leaflets in boxes
- ☐ printed newsletter
- ☐ digital newsletter
- ☐ open days
- ☐ telephone
- ☐ e-mail
- ☐ Other: ______

*** 28 How do you communicate with your producers?**

- ☐ personal
- ☐ e-mail
- ☐ organized meetings for producers at your company
- ☐ Other: ______

*** 29 Do customers and producers of the box scheme have the opportunity to meet personally?**

○ Yes ○ No

30 If yes, how do they meet?

______

*** 31 Please indicate which information you provide to your consumers about the products in the boxes.**

- ☐ Name of producer (farm/farmer/processor)
- ☐ Origin (region/country)
- ☐ Portraits of producers / processors
- ☐ Description of products
- ☐ Recipes
- ☐ Other: ______

Vision / Values

* **32**
How important are the following goals and values for your company?
1 = not important
2 = considered but not very important
3 = moderately important
4 = important
5 = extremely important

	1	2	3	4	5
organic production	○	○	○	○	○
personal interaction between farmers and consumers	○	○	○	○	○
local production	○	○	○	○	○
quality production	○	○	○	○	○
supporting small-scale farms	○	○	○	○	○
artisan production	○	○	○	○	○
traditional agriculture	○	○	○	○	○
reducing transport	○	○	○	○	○
reducing CO2-emissions	○	○	○	○	○
fair wages	○	○	○	○	○
supporting social projects	○	○	○	○	○
profitability	○	○	○	○	○
community building	○	○	○	○	○
transparency	○	○	○	○	○
transfer of knowledge	○	○	○	○	○
sustainability	○	○	○	○	○

Final questions

* ***33* Would you agree to be contacted for a Skype-interview about other aspects of your box scheme?**

○ Yes ○ No

***34* If yes, please enter your e-mail address so we can contact you to arrange an interview:**

35
Thank you very much for your valuable time and information!

Please feel free to give us additional comments or feedback: