

# Strategic Analyses of the Role of SMEs in Croatian Food Industry

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## Summary

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Croatian food industry is one of the most significant strategic segments of the whole Croatian industry. However, the largest producers in Croatian food industry are still large lapsed enterprises formed before establishment of market economy. Hence, our purpose is to present the state, role and potential of SMEs inside the industry. The analysis of the role of SMEs is shown through data about the number of enterprises, their size, rate of unemployment and revenues in the past ten years (1996-2005). As Croatian SMEs faces a new competitive environment the strategic models of their cooperation for larger competitiveness are considered.

## Key words

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Croatian food industry, strategic cooperation, networking, clustering

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### Basic attributes of Croatian food industry

Total number of enterprises in Croatian food industry is in continuous growth (Chart 1). In 1996 there were 743 enterprises, while in 2005 there was total number of 1182 enterprises. Expansion of the number of enterprises in Croatian food industry happened between 2001 and 2002 when 147 new enterprises were formed.

It is interesting to notice how the number of enterprises changed by size (Chart 2). Number of small enterprises in Croatian food industry between 1996 and 2005 was slightly grown. 606 small enterprises were in industry in 1996, while in 2005 there were already 1012. The largest growth was noticed between 2001 and 2002 (156 enterprises), while the period of the slowest growth was between 1997 and 1998 (only 1 enterprise). At the end of observed period number of small enterprises in the industry has grown net by more than 50% concerning the base 1996 (for 328 enterprises).

Similar like small enterprises, the number of medium enterprises is also increasing (Chart 3). At the beginning of 1996 there were 74 enterprises, while in 2005 there were 100.

Observing the data about the relative stake of each group of enterprises, it is clear that small enterprises are

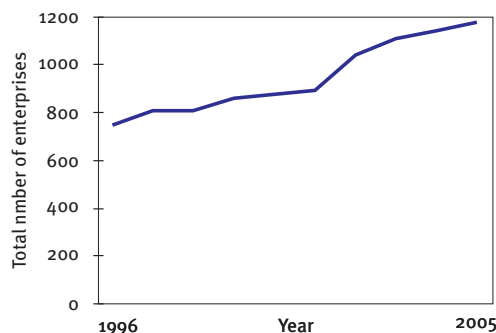


Chart 1. Total number of enterprises in Croatian food industry, 1996-2005 (Source: FINA)

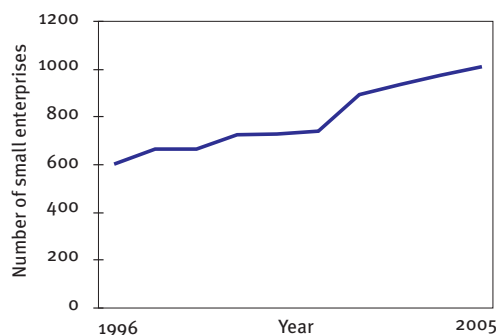


Chart 2. Total number of small enterprises in Croatian food industry, 1996-2005 (Source: FINA)

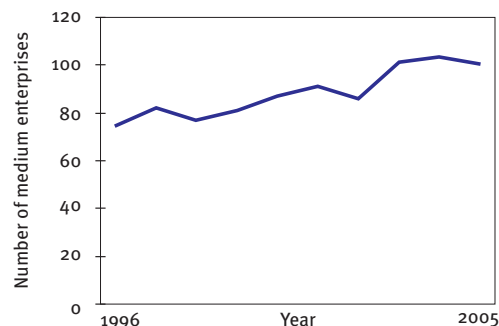


Chart 3. Total number of medium enterprises in Croatian food industry, 1996-2005 (Source: FINA)

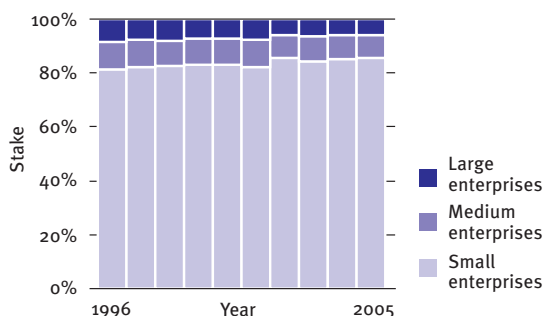


Chart 4. Stake of group of enterprises in total number in Croatian food industry, 1996-2005 (Source: FINA)

dominant in the total number of enterprises in Croatian food industry, with the stake continuously being about 80%. Stake of medium enterprises varies between 8% and 10%, while stake of large enterprises slowly decreases from 8% to 6% (Chart 4)

### Dynamics in number of enterprises and number of employees in Croatian food industry

Dynamics in number of enterprises and number of employees in Croatian food industry are divergent (Chart 5). Despite continuous increase in number of enterprises in industry, number of employees in observed period did not significantly change (48006 in 1996, 45407 in 2005). In the 1996-1999 period, employment in food industry was continuously decreasing (loss of 4000 workplaces), but since 2000 (with the exception in 2002) was continuously increasing, and the initial loss was compensated. Although at first look nothing significant has changed, trends are in their basis very clear – new employed workers were located almost strictly in small enterprises, while medium and large enterprises were decreasing the number of employees.

Analysis of number of enterprises and employees showed that divergence between number of enterprises and number of employees existed in medium and large, but not in small enterprises. Their employment was continuously increasing! Number of employees in small enterprises increased from 3725 in 1996 to 6881 in 2005. The largest increase in the number of employees in those enterprises was noticed between 2000 and 2001, when they hired 615 new workers.

Despite medium and large enterprises continuously decreasing size, there was a tendency of increasing small enterprises size in Croatian food industry in the observed period. Average small enterprise in 1996 had six employees, while in 2005, despite significant relative increase in the number of enterprises, average small enterprise had seven employed workers.

Observed by the number of employees average size of medium food enterprise significantly diminished in observed period. Although the number of medium enterprises increased by almost 50% (from 74 to 101), employment in observed period decreased by 23% (Chart 7). In 1996 those enterprises employed 9643 workers, while in 2005 they employed 6740 workers (2903 less employees).

Increased number of medium enterprises and decreased number of employees within the same enterprises caused decrease of average medium enterprise from 130 to 74 employed workers. With such movements, transition for the most successful enterprises from medium to large also had an effect, especially in last three years. That statistically improved appearance of large enterprises, but brought appearance of medium enterprises to a worse degree in industry comparing to the prior situation.

Although the number of large enterprises significantly varies in the observed period, significant oscillations were not present. Large enterprises in Croatian food industry in 1996 had 34638 employees, while in 2005 they had only

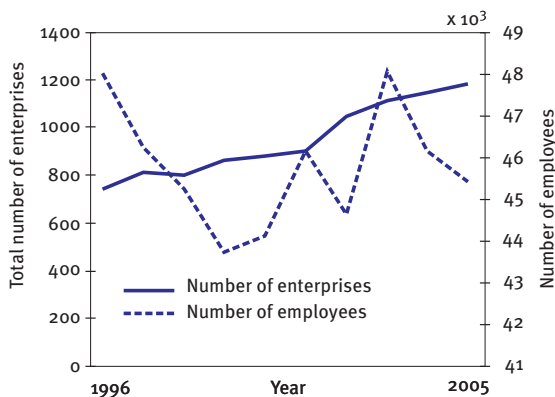


Chart 5. Total number of enterprises and their employees in food industry in Croatia (Source: FINA)

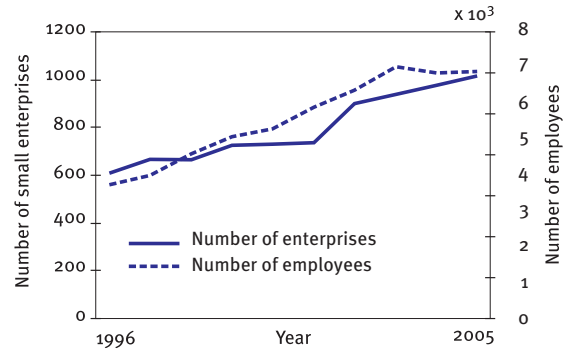


Chart 6. Small enterprises in food industry in Croatia and their employees, 1996-2005 (Source: FINA)

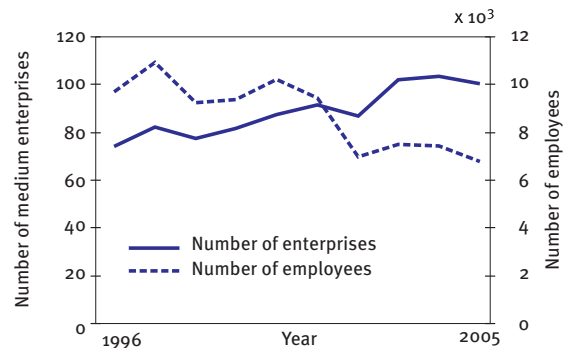


Chart 7. Medium enterprises in food industry in Croatia and their employees, 1996-2005 (Source: FINA)

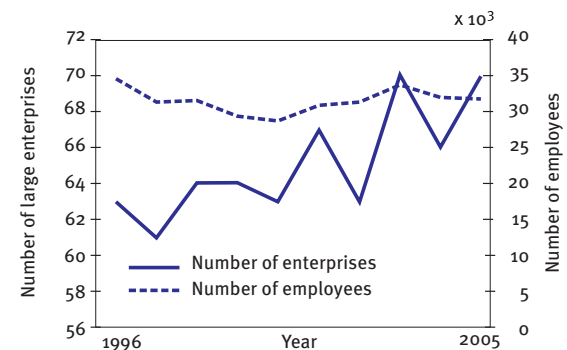


Chart 8. Large enterprises in food industry in Croatia and their employees, 1996-2005 (Source: FINA)

31768 employees (2870 of less employees). Those movements decreased average size of large enterprise from 550 employees in 1996, to 454 in 2005.

From data obtained by research we can conclude that the dynamics of movement in number of enterprises and employment in Croatian food industry were divergent size. Main tendency easily seen was increased importance of small and decreased importance of large enterprises in industry. Although small enterprises have a stake of 85% in total number of enterprises in industry (82% in 1996),

they employ only 15% of workers (8% in 1996). Contrary was for large enterprises, with the stake of 6% in total number of enterprises (8% in 1996), they employ 69% of workers (72% in 1996).

### Dynamics in number of enterprises and total revenues in Croatian food industry

Further on, dynamics movement of number of food enterprises and total revenues in various size enterprises were compared. Total revenue of Croatian food industry between 1996-2005 was continuously growing, with the exceptions in 1998 and 2004 (Chart 9). At the beginning of 1996 total revenue of food industry was 19 billion kunas, and in 2005 it was already 28.6 billion kunas. Total revenue of food industry significantly increased in 2001, 2003 and 2005.

It seems that the number of enterprises and total industry revenues do not match completely, moreover, dynamics in movement of total revenue stimulated dynamics of forming enterprises in industry (Chart 10). As new formed enterprises were mostly small, it is not strange. Such trends became especially clear in 2001, when relatively significant increase in total revenues happened alongside constant number of enterprises, and the very next year happened large increase in number of enterprises entering the industry (2002). Due to relatively significant increase in the number of enterprises in industry, it is easily seen that the number of enterprises almost stands alongside total revenues of the industry.

Dynamics of total revenue of small enterprises did not follow the trend of the industry. While revenues of the industry increased mostly from 2000 to 2005, revenues of small enterprises raised most dynamically from 1996 to 2000 (Chart 11). It leads to a conclusion that small enterprises their business success realize during slowdown of industrial growth, which they do not even generate. In the

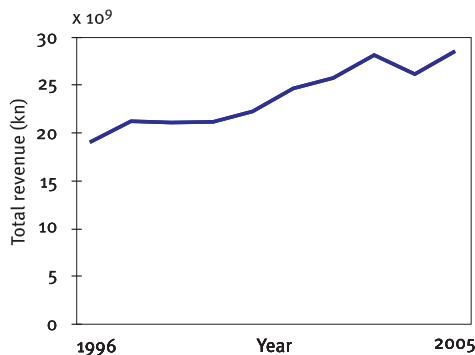


Chart 9. Total revenue in kunas in Croatian food industry, 1996-2005 (Source: FINA)

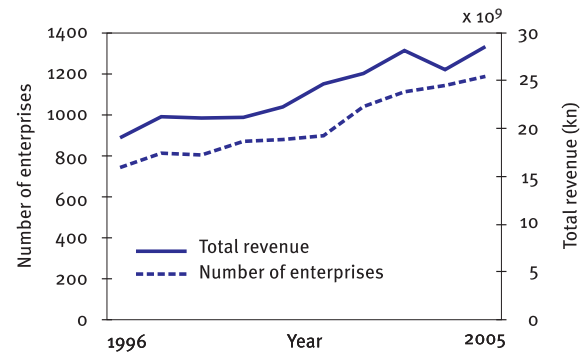


Chart 10. Total number of enterprises and total revenue in food industry in Croatia, 1996-2005 (Source: FINA)

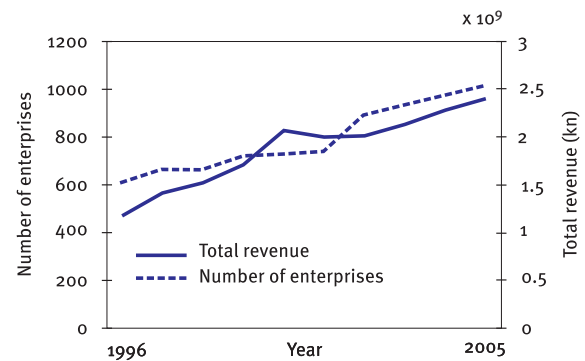


Chart 11. Small enterprises in food industry in Croatia and their revenue, 1996-2005 (Source: FINA)

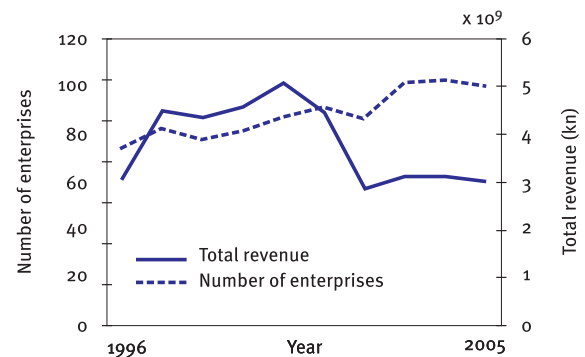


Chart 12. Medium enterprises in food industry in Croatia and their revenue, 1996-2005 (Source: FINA)

observed period total revenue of small food enterprises has been increasing from 1.1 billion kunas in 1996 to 2.4 billion kunas in 2005. Small enterprises had in 1996 total revenue of 1.65 million kunas on year average, while in 2005 total revenue was 2.4 million kunas. Business results of small enterprises would be even more impressive if there were not transformations of the most successful small into medium enterprises, which had repercussions on outlook of group of small food enterprises.

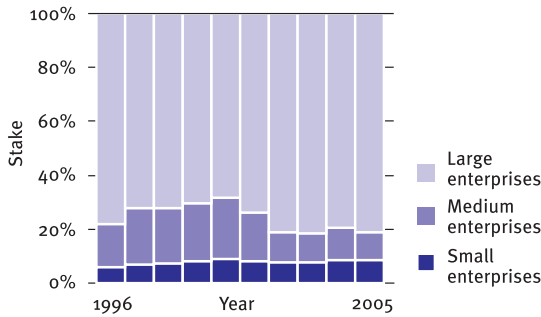


Chart 13. Stake of particular enterprises in total revenues in food industry in Croatia, 1996-2005 (Source: FINA)

For medium food enterprises, period between 1996 and 2005 was very favorable, but not in 2001 and 2002 when it was very negative, which leads us to conclusion that in 2001 relatively significant part of growing medium enterprises has changed size category and moved from medium to large enterprises. Growth and changing size category of the successful small enterprises did not succeed to turn such trends. Consequence was almost constant level of total revenue of medium enterprises between 1996 and 2005, about three billion kunas. At the level of average medium enterprises that means decreased from 40.8 million kunas realized in 1996 to 30.1 million kunas in 2005 (due to increase in number of medium enterprises from 74 to 101).

Observing relative stakes, it was clear that the structure of total revenue of Croatian food industry significantly changed in 10 observed years, mostly on cost of SMEs (Chart 13). Market position of large enterprises has empowered (growth of market share from 78% to 81%) mostly on cost of medium enterprises, which reduced their market shares from 14% to 10% (most likely because the most successful enterprises have changed their category to large). Growth of market share of small enterprises was very small (from 7% to 9%), again on cost of medium enterprises.

### Dynamics in movement of total revenue in Croatian food industry according to the number of employees

Total revenues, except for enterprise, should be observed by employee. In 1996 average employee in Croatian food industry realized 365000 kunas of revenue. As in the observed period employment at first decreased and then increased to initial level. Total revenue in the industry was in continuous growth, revenue per employee went up also, and at the end of the observed period was 587000 kunas (Chart 14).

Contrary to food industry's average, which was significantly improved in the observed period, measured by em-

ployee, small enterprises have stagnated since 2000. Reason of their statistical stagnation is significant increase of employment in small enterprises which has almost completely followed increase in revenues. In 1996 small enterprises have realized 295000 kunas per employee, which was in 2005 increased to 350000 kunas.

Medium enterprises in the observed period improved their statistics of revenue per employee, expanding it from

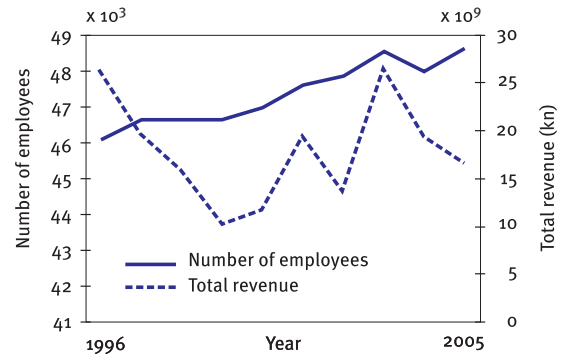


Chart 14. Total number of employees and total revenue in food industry in Croatia, 1996-2005 (Source: FINA)

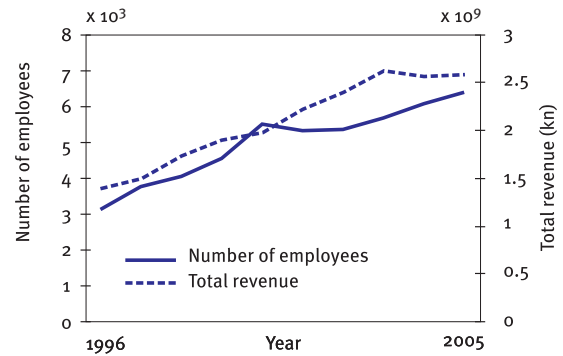


Chart 15. Total revenue of small enterprises in Croatian food industry and their employees, 1996-2005 (Source: FINA)

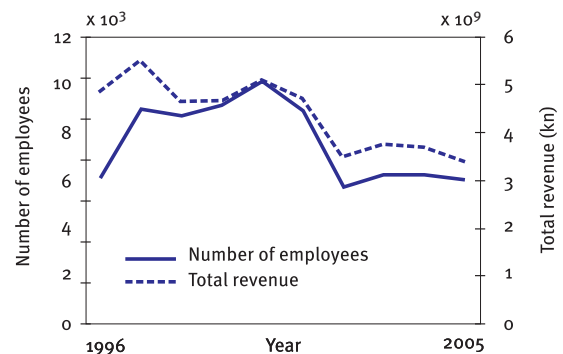


Chart 16. Total revenue of medium enterprises in Croatian food industry and their employees, 1996-2005 (Source: FINA)

313000 kunas in 1996, to 445000 kunas in 2005. Such results medium enterprises have realized due to decreased employment, especially in 2001 and 2002, while their revenues were relatively decreased at a lower rate (Chart 16). Medium enterprises, just like small, realized significantly lower revenues per employee relative to industry's average.

As a preliminary conclusion, at the Croatian level of food industry small enterprises generated 8% of revenue of food industry in 2005 (8% in 1996), employing at the time 15% of workers (8% in 1996). On industrial level they had surplus of employment (or deficit in revenues). Analyzing the movement of generated revenue and the number of employees, large enterprises operate above average level of efficiency, generating in 2005 81% of revenues (78% in 1996), with only 70% of employees.

### **The strategy of development of SMEs in Croatian food industry**

The powerful influence of world market and liberalization of import are new challenges for SMEs in Croatian food industry. The process of adjustments to newly appearing conditions on domestic and foreign market in the forthcoming years includes new products, the technological development, decrease of production costs, strategic investments and especially cooperation.

The reality of a new competitive environment in which a clearer understanding of their small size and individual potential of production will bring them to the conclusion of necessity of cooperation for achieving better results. Cooperation of Croatian SMEs in food industry through strategic linking and networking represents the new way of organizing and collaborating business with the aim to give Croatian SMEs in food industry better competitive advantage in EU.

Until the recent time, the only way for expansion of business of one small producer in food industry was by employing new people, by the purchasing new technology and by the individual providing of business processes. However, the options of acquiring and combining of resources which today's stand on the disposal for Croatian SMEs in food industry are numerous and complex.

Today the Croatian SMEs in food industry can use the services of consultants from entrepreneurial incubators, use different benefits that offer such entrepreneurial infrastructure like: access to resources and new markets, hiring temporary additional workers, take a favorable credits or lease new equipment for growth of production activities etc. The entrepreneurial supporting platforms provide also all preconditions for uniting their resources with the resources of other producers through partnerships.

The SMEs can also network and participate in the designing of completely new production identities, like virtual enterprises or clusters. By the expansion of supply chains the networks of interconnected enterprises emerge. By linking and networking with their supplier and consumers it comes to the appearance of networked and virtual organizations.

A virtual organization could be defined as a group of individuals or organizations who keep a legal independence form and who are connected in order to perform specific business activities. Towards the market they act like a unitary organizational entity (virtual enterprise) and they co-ordinate their behavior through the connections founded on the trust, contracts and common information systems and databases.

The concept of virtual organization is based on the fact that it is possible to increase the volume of business without the enlargement of the size and formal borders of SMEs. Connection of different SMEs specialized on their basic activities and core competences in a virtual enterprise, which emerge in this way, is much more effective than the extension of classic organized SMEs.

The implementation of concept of virtual organization by Croatian SMEs in food industry would help them to achieve the economy of scale by drastically reducing the costs necessary for the entry on market, and give them the possibility of utilization synergic effects that appear during cooperation. The advantages of virtual organization are also hidden in the possibility of the sharing of business risk that facilitates the market competition to its members and fast adjustment to market changes.

The advantages of virtual organization are also hidden in the share of properties, resources and core competences of her members, with the aim to increase the existing geographic covering or taking the larger part of the market. The share of costs of the usage of technology, properties and resources would leave Croatian SMEs in food industry more resources for the spending on the development of new products. Such specialization would enable Croatian SMEs in food industry to achieve high level of quality of products or services.

The cluster concept extends and transcends this discussion. Clusters constitute favorable environments for fostering the competitiveness, innovation capacities and growth of SMEs. In the food industry especially, they can help SMEs create critical mass, pool resources and find business partners as well as access to technology, knowledge and common services.

The specific motives for joining the cluster for Croatian SMEs in food industry can be different: synergic impacts, conquering the new markets, sharing of the risk, tech-

nology transfer, obtaining new knowledge, better usage of the resources, pressure on competition, etc. The process of cooperation in a cluster can also bring them to the identification of the now unrecognized opportunities on the European market. The clustering of Croatian SMEs in food industry becomes, in itself, the effective strategy for the overcoming the gaps in the know-how, resources and abilities in order to realize the competitiveness on European market. The strategy of clustering will go on. More and more, regional clusters will be getting linked and will become a part of national and international value chains in food production industry.

### Conclusion

The analyses of developments of Croatian food production industry in the period of 1996-2005 lead us to the conclusion that the most significant potential lies in SMEs. The results of different indicators showed their growth. But this growth is still not satisfactory.

The revolution of new knowledge, technological solutions and organizational models forces the Croatian SMEs in food industry to give up the traditional business paradigms. If Croatian SMEs intend to play important role in market games on regional markets they need to join the world trends and use all modern organizational methods. Therefore the growth of the level of usage of networking in Croatian SMEs can be expected. That will give them the opportunity for increase of efficiency and the improvement of competitive position on the global market.

The cluster concept points out that the success of individual SMEs does not depend only on their own activities and their own supply chains but also on the activities of connected organizations. In the practice of developed countries the application of strategic linking and clustering in food industry has already reached the significant level

and has a tendency of further growth. The SMEs that accepted the benefits that bring those conceptions can expect the significant growth of their production results and the growth of competitiveness on the market.

The implementation of this new business models and strategies will help Croatian producers in food industry with the answer how to adjust their SMEs to the newly risen circumstances. Therefore, the economic policy of Croatian government argue for importance of networking and clustering for achieving competitiveness of SMEs in food industry. A lot of efforts to change the managerial attitudes towards benefit of networking and forming clusters of Croatian small and medium food producers are given. As this is the only way to be competitive with the large European competitors no Croatian SMEs in food production industry can afford to ignore the use of these new business models in their competitive strategy.

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