



EVALUATION OF THE EUROPEAN SCHOOL MILK SCHEME

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FINAL REPORT

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EVALUATION OF THE EUROPEAN SCHOOL MILK SCHEME (SMS)

(1) Introduction

- For decades per-capita consumption of milk products has been declining in most EU Member States (MS).
- Since 1977, Member States (MS) have access to Community aid through the EU School Milk Scheme (SMS) for providing children in educational establishments with milk and certain milk products. In the SMS Member States receive a fixed amount for every kg of milk equivalent distributed in the form of milk and certain milk products to children in educational establishments. Member States can give national top-ups.
- The legal basis of the SMS within the Common Agricultural Policy can be found in Articles 39, 41(b), 43 and 168 of the TFEU. Council Regulation (EEC) No 1234/2007 and Commission Regulation (EEC) No 657/2008 create the legislative framework for the SMS with two core objectives:
 - a. Increasing EU milk consumption and milk demand to fight the declining trend and stabilising the market price for milk and milk products.
 - b. Increasing consumption of milk and milk products of children and young people by providing them with healthy dairy products.

Beneficiaries of the aid are pupils of nursery- or other preschool establishments, primary and secondary schools which are recognised by the MS's competent authorities.

Products that are eligible to obtain the aid are listed in Annex I of Regulation No 657/2008. MS may apply stricter rules for the eligibility of products.

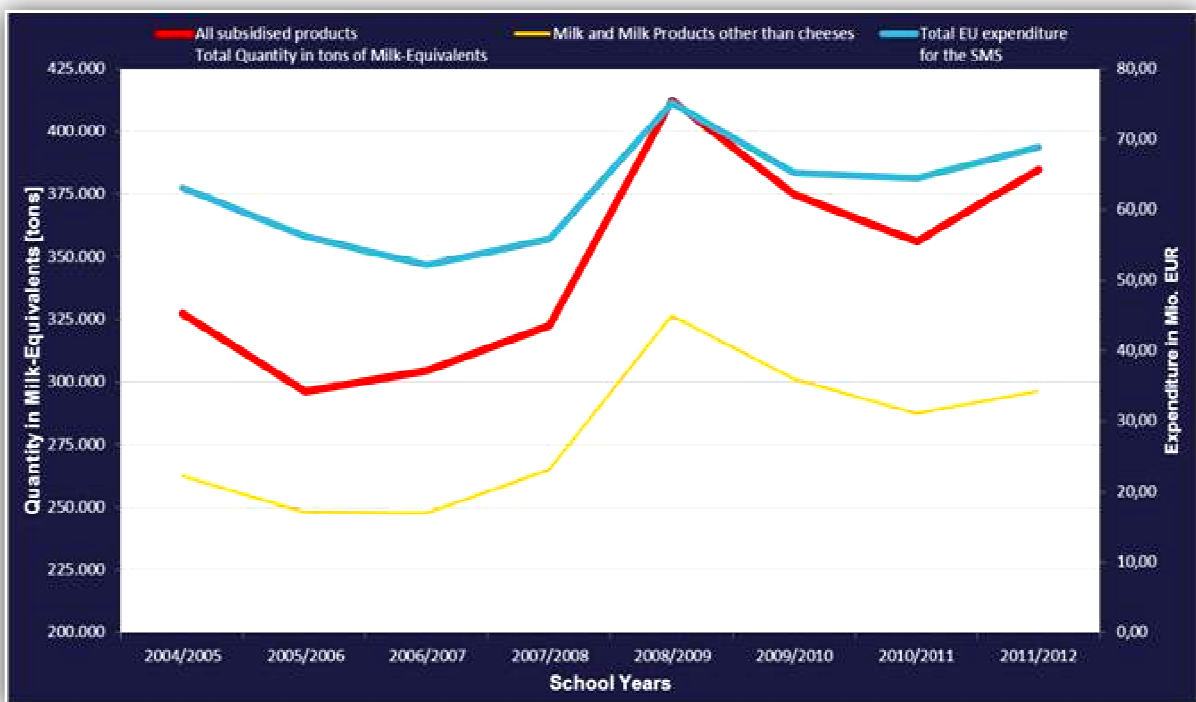
The aid rates are set out in Annex II of the Regulation No 657/2008. The maximum quantity of milk eligible for aid is 0.25 litres of milk equivalent per school day and pupil. Various conditions have to be taken into account such as different categories of products, the number of school days or the fact that milk used for meal preparation cannot benefit from the aid.

Applicants that are listed in Art. 6 of the Regulation are suitable for the supply of milk products. Applicants have to be approved by the competent authority of the MS.

MS are committed to take care that the amount of the aid is duly reflected in the price paid by the beneficiaries. MS shall take all necessary measures to ensure compliance with this regulation, including on-the-spot checks, checks of book-keeping records and much more. Educational establishments participating in the SMS have to install a poster at the main entrance in accordance with minimum requirements laid down in Annex III of the Regulation.

EU law requires a periodical evaluation of all measures that cause budgetary expenditure. The Commission's Directorate-General for Agriculture and Rural Development meets this obligation with respect to the SMS with this evaluation study.

Figure 1: Development of SMS implementation in the EU27 (2004 - 2012)



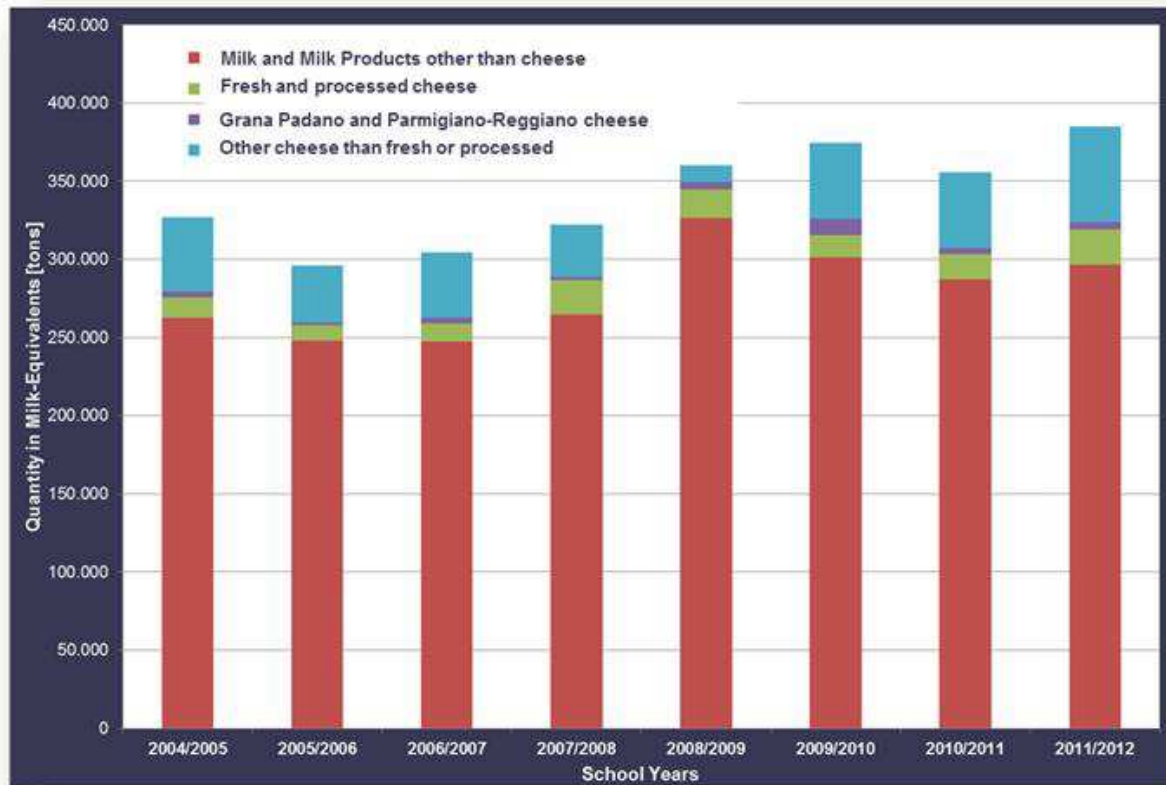


Figure 2: Subsidised products within the SMS (2004 – 2012) - absolute numbers

(2) Objectives and Methodology

This evaluation covers the school years 2004/05 to 2011/12 and examines in detail the SMS's effectiveness, efficiency and deadweight, coherence, relevance and EU value added.

The evaluation report is based on

- Legislative documents
- Scientific literature
- Existing European, national and regional evaluation and monitoring documents
- Results of a standardised questionnaire (implementation survey) carried out in all participating Member States (26 MS)
- Qualitative expert interviews with administrative bodies, school milk suppliers, market experts, school headmasters and parents of participating children carried out in 8 Member States (case studies): France, Germany, Hungary, Italy, Poland, Sweden, The Netherlands and UK.

(3) Results of the Evaluation

IMPLEMENTATION OF THE SCHOOL MILK SCHEME

- Within the last decade the overall scale of the SMS in terms of total amount of subsidised products and total expenditure increased to about EUR 110 million (68.86 million EU funds and 41.44 national top-ups) in the school year 2011/2012.
- The individual national and regional school milk schemes are very different with respect to the relative participation of school children and distributed quantities. The estimated number of participating children in the school year 2011/2012

was about 20 million. The quantity of distributed products in the school year 2011/2012 amounted to 385,000 tons of milk equivalent.

- National contributions ('top-ups') are voluntary and vary strongly across the MS. The uptake level of EU aid (percentage of the maximum budget used) is low across MS. The average uptake in the EU27 reached approximately 17%.
- Drinking milk (plain and flavoured) is most subsidised within the SMS while cheese amount for approximately 20-25% of milk equivalent provided under the SMS. Plain milk remained also the most important product after 2008 although the amendment of the Commission Regulation in 2008 widened the range of eligible products.

IMPACT OF THE SMS ON THE EUROPEAN MILK MARKET

- Compared to the total market volume of milk and milk product, the volume of the milk distributed in the SMS is very limited. However, this fact cannot serve as the only indicator for the SMS's market impact.
- The SMS is based on the assumption that it affects the consumption behaviour of children which later become parents, passing on their milk drinking habits on the next generations, so that milk consumption increases over the generations. Such a long-term effect might result in a remarkable impact of the SMS on the market balance, in comparison with a counterfactual situation without a SMS.
- Quantitative indicators for these long-term multiplier or leverage effects are difficult to define and statistical evidence on the magnitude of these effects is therefore hard to provide for the evaluation period.

IMPACT OF SMS ON CHILDREN'S MILK CONSUMPTION

- In many MS young children in kindergartens and Primary Schools meet - but only on average - the recommended intake of milk and milk products. However, milk consumption declines with increasing age and older children and adolescents often remain below intake recommendations. The SMS therefore addresses also Secondary Schools, yet the Member States focus in the SMS is mostly on younger children in kindergartens and Primary Schools.
- Children who are already used to drinking milk show a higher tendency to participate in the SMS than children with low milk consumption. This is caused by taste preferences developed in the home environment and by the parental contributions (the part of the school milk price to be paid by the parents) required in most national or regional SMS programmes. The distribution of milk and milk products stimulates milk consumption of the target group, yet it is hard to verify if the SMS reaches those children who need the provision most.
- Long-term effects of the SMS on milk consumption could not be measured due to a lack of data in the MS. The evaluation found that distribution in educational establishments is a step leading to a long-term impact on consumption of milk products under the condition that the provision of products is accompanied by measures fostering good eating habits.

obesity and overweight are not systematically communicated.

- Linkages between the SMS and the fight against obesity and overweight are not actively communicated in the MS. The SMS's national or regional implementation is not based on behavioural theories as it is generally recommended for school interventions in the academic literature.
- A wide range of different educational materials and activities are offered voluntarily in the Member States, in particular by milk suppliers and dairy organisations. However, these measures are not designed to influence eating habits. The voluntary educational measures are often temporary and have a small scale. Neither their impact nor their success is documented, monitored or evaluated.
- Where educational measures were carried out, it turned out that children liked to participate and to learn about healthy nutrition and the production and processing of milk. SMS stakeholders and the majority of the interviewees in the surveys carried out for this evaluation are strongly in favour of obligatory educational measures in the SMS.

EDUCATIONAL CHARACTER OF THE SMS

- At present the EU Regulation concerning the SMS does not require educational measures. Messages on the role of milk consumption to substitute soft drinks and thus fighting

IMPACT OF THE EU AID ON THE SMS'S EFFECTIVENESS

- Evidently, the total budget spent on the SMS in a country has a significant impact on its effectiveness in terms of the number of participating children. A lower budget leads ceteris paribus to a lower participation and vice versa.
- It has been observed that in most MS - due to slightly but continuously increasing milk prices in the last decades - the share of the EU subsidy in the price of school milk has been decreasing. Member States therefore justify their national top-ups by a "too low EU subsidy".

- The milk prices that have to be paid by the parents influence the participation rate in the SMS. However, prices have only a limited impact if the parents have a high income.

- The evaluation has found that only a free distribution of milk in schools would result in a sharp increase in consumption.

- Beside the price subsidy, most MS indicate that the EU framework of the SMS was the main driver for launching and implementing a school milk scheme in their countries.

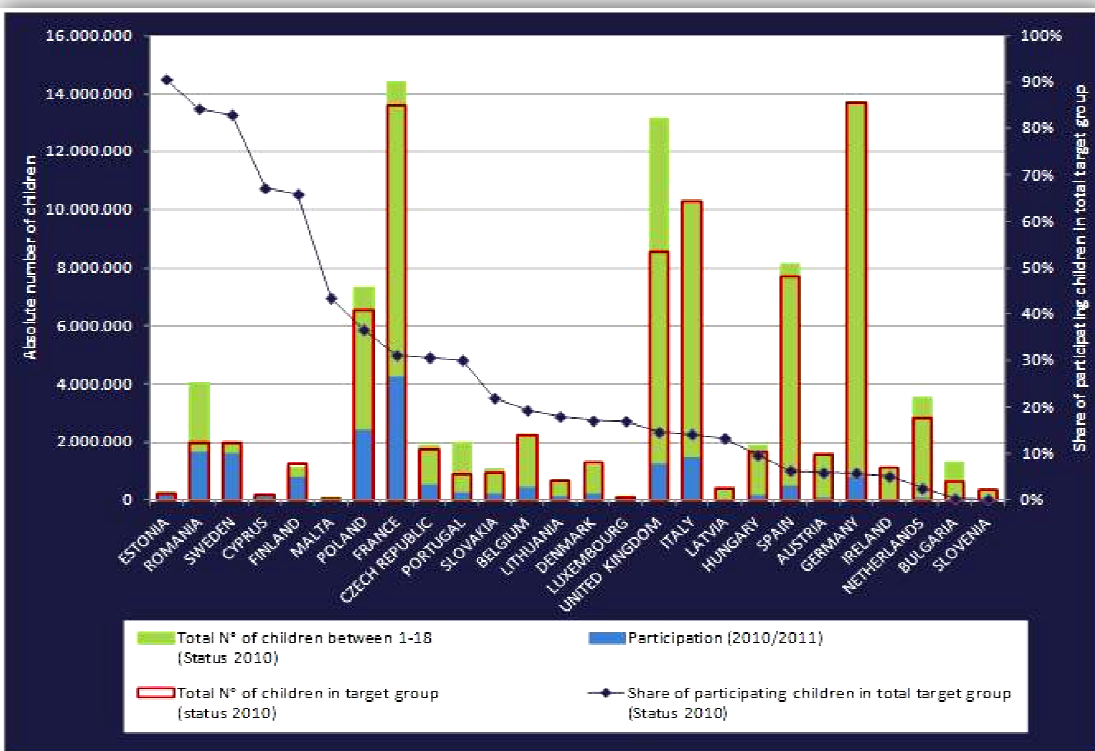
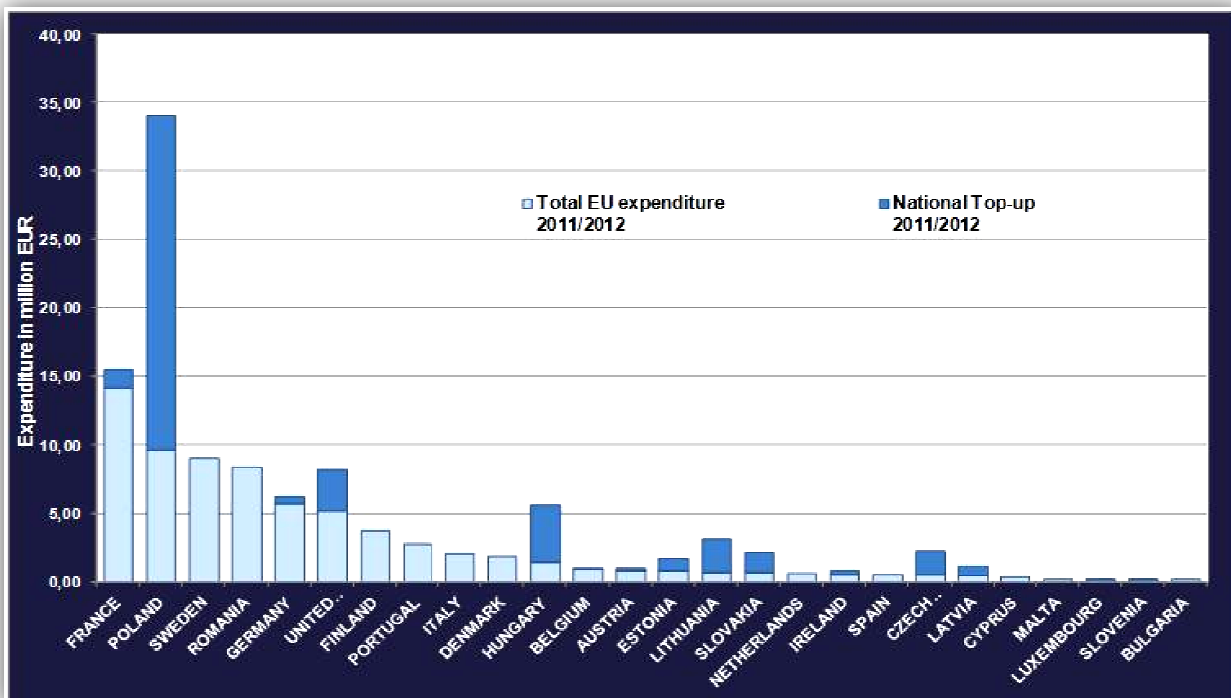


Figure 3: Target groups and participation in the school year 2010/2011

Figure 4: Total EU expenditure and national top-ups in the SMS (2011/2012)



IMPACT OF SOCIO-ECONOMIC FACTORS

- Although the individual MS have quite different eating and drinking habits, **milk is in general an important part of the populations' diet in the EU.**
- Regarding socio-economic factors the statistical analysis provided no evidence for a significant correlation between selected socio-economic factors and the SMS's effectiveness. This result is comprehensible, since measures or actions which refer to the socio-economic target dimensions are neither considered nor transferred in the SMS's design so far.
- However, the qualitative interview survey carried out for this evaluation shows that social and economic variables have indeed an impact on the implementation and effectiveness of the SMS. According to 50% of the interviewees of the qualitative survey for this evaluation a higher parental contribution – the part of the milk price that parents have to pay in the SMS after the EU aid and national top-ups have been deducted - has a clear negative impact on the participation of children from less privileged social backgrounds.
- This is an important finding with respect to the social dimension of the SMS. **The consideration of the socio-economic dimension within the general design of the programme is therefore urgently needed.**
- The survey identified other important socio-economic factors influencing the participation in the SMS e.g. the family income and the knowledge on nutrition of the families that the participating children belong to.
- Furthermore, the motivation of the administrations, of the school staff and of the dairy sector is a crucial factor for successful distribution of school milk in each country.

ADMINISTRATIVE AND ORGANISATIONAL BURDEN

- Burdens in the SMS can be divided into those related to meeting legal obligations to provide information on the one hand – the administrative burdens – and those for actually distributing the school milk – the organisational burdens.
- Information on administrative costs caused by the SMS is in most cases not recorded and documented at Member States level. For this reason the indicator for the administrative burden used in this analysis is only a rough estimate. It is primarily based on the assessment of staff costs required for all administrative tasks of the SMS.
- The resulting administrative costs are relatively high in some Member States and the variation of relative administrative costs among Member States is also quite high. **Administrative burdens are higher in Member States where the uptake of funds - the use of the EU budget available - is rather low.**
- While administrative burdens of the SMS are born by administrations (e.g. ministries) and dairy suppliers, **organisational burdens are born by the participating schools, teachers, school staff and parents.** Most school milk suppliers evaluate the burden they have to handle, like providing the security guarantee and applying the supplier licence as disproportionately high. Product controls are also considered as burdensome. However, **larger suppliers are able to reduce significantly administrative costs by process-automation and -standardisation through adequate software tools.**
- **The organisational burden of collecting the parental contributions seems to be an obstacle for participation,** if it has to be carried out by the schools (teachers).
- **The evaluation revealed the importance of monitoring closely the organisational burden of the persons involved in the operation of the SMS.** Even small variations of the

organisational burden influence the willingness of schools to participate in the scheme.

ADVANTAGES OF A STRATEGIC PROGRAMMING APPROACH

- The evaluation has found that **a strategic programming approach is lacking at present**. Such an approach could improve the effectiveness of the SMS. It would adequately address weaknesses of the present scheme: lack of integration of all stakeholder groups and application of all the tools necessary to reach the SMS's objectives and use the synergies with the EU School Fruit Scheme.
- It has been found that strategic planning is needed in three key areas in order to strengthen the SMS intervention:
 - (1) Simplification of the access to the SMS.
 - (2) Target-group specific SMS implementation and other approaches to increase the attractiveness of the SMS.
 - (3) Better cooperation and communication between relevant stakeholders.

EFFICIENCY OF THE SMS

- In order to measure the SMS efficiency a common indicator for all MS has been developed in the evaluation. This indicator reveals that **comparable subsidies lead to quite different results in the Member States**.
- The evaluation found a statistically significant correlation between the *spending per child and year* and the *share of participating children*. However, a high spending per child does not automatically lead to a higher participation share.
- The evaluation produced also the observation that a **relatively high spending per child maximises the interest of the target group to participate but often leads to a smaller scale of the SMS due to budgetary limitations**.
- A problem in measuring the efficiency of the scheme results from the fact that one of the most important output indicators, the number of participating children, is not harmonised across Member States. The EU Regulation asks for reporting on the "number of participating children in the scheme" since the school year 2008/2009, but does not define this variable explicitly. **The way in which Member States calculate participation varies strongly. To address this issue the Commission has already amended Regulation 657/2008 in August 2013**. The amendment adds to the existing monitoring obligation "*the approximate number of participating children in the scheme*" also "*the approximate number of children in regular attendance in all educational establishments participating in the school milk scheme*" and "*the approximate number of children eligible under the school milk scheme*".

DEADWEIGHT EFFECTS

- Deadweight is a special case of programme inefficiency. Deadweight refers to effects which would have arisen even if the intervention had not taken place. Deadweight usually arises as a result of inadequate delivery mechanisms, which fail to target the intervention's intended beneficiaries sufficiently well. As a result, other individuals and group who are not included in the target population end up as recipients of benefits produced by the intervention. It has to be investigated whether or not the

programme is efficient and provides an additional "milk portion" to young people.

- With respect to the SMS, one has to consider that **demand behaviour differs for different products, thus changes of product prices lead to diverse reactions of consumer demand**. In Germany for example, the increase of consumption through declining prices is significantly stronger in the case of flavoured milk than for plain milk. The financial effort to reach a higher participation in Germany is much higher if only plain milk is offered.
- **It can be assumed that the lower the demand effect of the SMS subsidy is, the more probable is the existence of policy inefficiency in the form of deadweight effects**. Scientific findings indicate that decreasing the milk price leads to increased milk consumption at schools. However, in general the demand increase behaves under-proportional to the price reduction. **Only the free of charge provision leads to an over-proportional (drastic) demand increase**.
- **Contrary to the effects of a price reduction, the free distribution constitutes more than a pure price driven stimulus**. The free distribution leads to further psychological effects and to less organisational effort in the operation of the SMS which stimulates the demand behaviour significantly and therefore, the participation in the SMS strongly and positively. Furthermore, due to the omitted parental contribution the problem of excluding children of low-income families can be avoided and as all children in a class may participate, children's interest in the SMS might benefit from group dynamics.
- Another aspect which has led to deadweight effects is the **missing awareness of the SMS's existence** by its participants e.g. due to the fact that the milk is in some cases part of regular school meals.
- **Promising approaches to avoid and overcome deadweight effects are the prioritisation of milk products that theoretically imply a strong demand effect, an exclusively "explicit" product distribution and distribution of school milk fully out of charge**.

COHERENCE OF THE SMS

- The evaluation has found that the SMS is coherent with the overall CAP objectives, especially with the specific objectives of contributing to farm income, maintaining market stability and maintaining a diverse agriculture in Europe.
- **While the SMS and the Strategy for Europe on Nutrition, Overweight and Obesity-related Health issues are coherent, there is room for further alignment of the SMS with the principles specified in the Strategy:**
 - (1) Reduction of all risks associated with excess weight
 - (2) Action across all groups, policy areas and a wide range of instruments
 - (3) Requirement of actions from all organisations, industries, political and private stake-holders involved
 - (4) Monitoring and assessment of the prevalence of obesity, overweight, eating patterns and measures undertaken to implement the strategy
- **The evaluation has identified the complementary character of the SMS, the EU School Fruit Scheme and the EU**

information policy. The objectives of these three policies are coherent. Although the SMS and the School Fruit Scheme are quite similar with regard to their objectives and their intervention logic, both programmes are hardly linked at the moment, neither at EU level nor in the Member States. Furthermore, both schemes compete against each other at school level as regards to crucial resources and man power.

RELEVANCE OF THE SMS

- **The SMS is an adequate tool for increasing milk consumption of children and thus improving their eating habits.** The relevance of the scheme for that purpose can be increased by adding to its policy design: educational measures, free distribution of the milk products to the children and better information on the scheme for parents.
- Interviewees identify the five most important success factors for school milk programmes to be: high frequency in offering milk and milk products, accurate delivery and reliable logistics, integration into the daily routine, collective consumption and voluntary educational measures.
- **While long-term effects of the scheme may contribute to the market balance, short-term market effects are found to be small.** The evaluation contains suggestions how a stronger relevance of the SMS can be achieved. The implementation of design elements which are specified in a way that they distribute as much milk products as possible, for as long as possible, to as many children as possible, so that the SMS's scale is as high as possible, will contribute to an increasing market relevance of this measure.

EU VALUE ADDED GAINED BY THE SMS

- **EU value added of the SMS is recognised by the Member States.** Most Member States indicated that the EU SMS was the main driver for launching and implementing a school milk scheme in their countries.
- The potential for higher EU value added has been identified in this evaluation e.g. through a stronger knowledge transfer between MS and with experts, a periodical review of the scheme and through better promotion and more active communication of the achievements of the SMS.

(4) Recommendations

- The SMS should be redesigned to permit for a sustainable stimulus of children's milk consumption. The intervention logic should be based on a behavioural theory. A more strategic approach is required.
- A set of monitoring and evaluation indicators should be defined that allows an assessment of the implementation and impact of the SMS. Clear monitoring and evaluation obligations based on an adequate set of indicators should be introduced at the level of Member States and at the EU level.
- It is recommended to introduce educational and communication measures eligible for the EU aid as part of the SMS.
- When targeting the SMS, adequate attention should be paid to children's age since milk consumption declines with increasing age and adolescents show higher needs to meet the recommended intake. Furthermore, age appropriate approaches are necessary to keep children's interest in the SMS.
- In view of the empirically observed trade-off in the scheme between spending per child and participation in the scheme, it should be considered to establish minimum thresholds for spending per child and participation.
- Free distribution (fully out of charge) of milk products to children should be explored to increase the participation of children in the scheme. Therefore, it is advisable to discuss alternative financing models, for example a co-financing approach.
- Administrative burdens of the SMS can be reduced by: (1) Simplification of product checks and administrative controls through a risk-based, spot-check approach as well as a simplification of the registration procedure of suppliers. (2) Realisation of synergy-effects between the SMS and School Fruit Scheme e.g. by a combined administrative framework.
- Reduction of the organisational burdens should be sought. This could e.g. be realised by better access of small suppliers to software tools to manage their SMS operations and by organising the collection of parental contributions outside participating schools.
- The alignment between the SMS and the School Fruit Scheme should be improved. Merging the administrative frameworks or even the whole schemes may provide advantages such as reducing the administrative and organisational burdens as well as the costs of distribution.
- Since the SMS contributes also to the objectives of the EU information and promotion policy, it should be explored how to improve information campaigns.
- Further synergies should be sought between the SMS and the Strategy for Europe on Nutrition, Overweight and Obesity-related Health issues.



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