

**School Milk Programme – The Economic Dimension**  
**A study of the economic impact of China School Milk Programme (CSMP)**  
**2003**

**Preamble**

This is a précis of a study by Beijing Prime Dairy Research Institute to highlight and quantify the economic impact of School Milk Program (SMP) in China and also the radical approach on SMP through a unique public private partnership arrangement that allows progress without the need for aid or subsidies.

**Background**

Most school milk operations focuses on the end users - and in most cases this means the poor. This implies the need to access funding either by aid or government subsidies in order to operate. Benefits are usually measured in terms of nutrition gained, increased school attendance and milk sales. However SMP dependent on aid or subsidies means they are often unsustainable. Finance stop, programme stop, benefits stop.

CSMP is radical because it breaks previously held fundamentals on SMP, the dependency on aid/subsidies and sustainable long-term benefits.

CSMP is not a nutrition programme, but design to foster growth in the rural areas through increase economic activities; for rural areas this means agriculture. It is through increase income via growth in agriculture sector, which to achieve its ultimate goal – poverty reduction. The main beneficiary is not the consumer, although they will also gain by gaining access to better and cheaper food but the development of the food /agriculture value chain and in this case – the Chinese dairy agro industry.

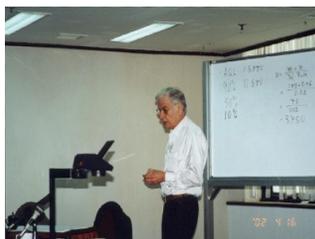
**Key Features of CSMP**

The CSMP is the creation of an institutional market for milk. The demand created by the drinking milk will exercise a pull effect along the whole dairy value chain. The imposed regulations and conditions impose the need to investment and develop the entire dairy value chain. The programme was inaugurated in early 2000 in four pilot cities. After a period of consolidation, the programme was expanded to other provincial cities. Today the programme supplies to about 2 million school children a day.



The CSMP is a public private cooperated exercise. Lead by the government through the Chinese School Milk Programme Committee (CSMPC), which oversees the rules and regulation and strategy of the SMP. The execution is entirely in the hands of the private sector, which drives the programme.

There are no government subsidies. Milk is sold to urban school children at a discount (generally 25% ~30% cheaper) through a voluntary monthly subscription process. The discount is achieved through negotiation. The lower price is offset by a three year long contract, a monopoly condition within a prescribed area, no competing products within participating schools, as well as permission for branding and advertisement on its school milk package. On top of that the CSMP will utilise the official channel to publicise the programme to the schools and general public.



The CSMP supplier tender is a tough process, which not only rates the candidate in areas of hardware, production, company, operation but also on staff and quality. Key investments in hardware such as mechanical milking, UHT processing and aseptic packaging is a must to ensure the highest quality. Regulation stipulate that products must be made with raw milk; production and management processes must adhere to standards such as ISO, GMP (Good Manufacturing Practice) and even HACCP (Hazard Analysis and Critical Control Point). Increasingly the consumers see the accreditation process as a mark of quality.

## Key Findings

Index of Success	1999 (Before CSMP)	2002 (3 years On)
Number of Dairy Cows (Gross)	4.6 million	6.8 million
Raw milk production (litres)	8.0 billion	14.0 billion
Consumption per capita	6.7 kg	10.9 kg
Number of Dairies (approx)	700	1600
Number of Children under CSMP	0.4 million	2.0 million
Dairy Farmers Income (Gross)	2.15 billion US\$	3.24 billion US\$
Others (rounded figures)	<ul style="list-style-type: none"> <li>- US\$ 100 million invested in Farming (00-02)</li> <li>- US\$ 400 million invested in the Dairy Industry (00- 02)</li> <li>- US\$ 933 million increase in Gross Output in 2002</li> <li>- US\$ 363 million increase in GDP in 2002</li> </ul>	



It may look great at the macro level, but how does it fare at the micro level, the rural farmer? Take the case of Mr. Wu, a dairy farmer from Chengdu city, SW China. In 1995 Mr. Wu, was an employee at the state farm, he earns 73 US\$ a month. Made redundant in 1996, he use his redundancy money to purchase 8 cows, life continued to be tough, until in 2000 when Jule, the Chengdu dairy was able to gain accreditation as a CSMP supplier. The increase sale from the CSMP means Jule has to do more to secure raw milk supply. In 2002 the corporate farm was inaugurated and in the same year, Mr. Wu became an independent farmer within the Jule corporate farm. The decision to invest

into raw milk supply by the Jule was driven by the stability offer by the 3 year SMP contract. With the long-term supply of milk to school secured, the city dairy was then willing to commit to the farmers like Mr. Wu, a long-term raw milk supply contract. This long-term commitment by the buyer thus enable Mr. Wu to seek a bank loan to buy more cows, better staff and equipment. By the end of 2002 Mr. Wu's herd has risen to 35 cows, worth over 48,000 US\$.

The CSMP contract is an attractive commercial proposition to many dairies, however the condition of the supply contract put the earnest on safety and quality which forces the supplier to constantly upgrade their operation in hardware and training in order to maintain the supplier accreditation certification. As an example in the 3 years since CSMP started, the quality standard requirement was up graded from a simple ISO 9001 to now HACCP qualifications.

The parents of school children subscribed to CSMP because CSMP offer value for money and the tough accreditation process offers the consumer extra confidence to the products that they offer. This confidence also rubs off on to the commercial products from these 48 dairies. Not only does the dairy gain directly from the extra business from the SMP, the more so the extra sales gain from the commercial sector.

The above case offers the reader a taste to the background behind the numbers listed in the above table. What the CSMP offers is the stability that gives the dairy operators throughout the value chain the confidence to invest to improve industry. The snow balling effect cascade down the value chain and also touches the supporting industries like fodder supplier, veterinarian services etc. This is the real benefit of CSMP.

### **Conclusion:**

SMP can be a powerful vehicle for poverty alleviation and economic stimulation, as well as 'traditional' benefits of nutrition and educational. However SMP as an economic development tool is less recognised. The positive effect of CSMP on the dairy value chain is self-evidence. Where as it is difficult to quantify the contribution made by CSMP versus other factors, however it is safe to say that CSMP has play a significant role in the growth, especially in bringing about the investment and changes in the core fundamentals of the industry.

CSMP is remarkable that it is not dependant to state or overseas aid. However the fact that it does not depend on subsidies means that the consumer must have the financial resource to purchase. This means feeding the middle classes rather than the poor. This shift will be uncomfortable to some, but CSMP was designed to foster economic growth in the agro food industry and the through this growth the operators within the value chain be relieve from poverty. The goals are different; and by this measure CSMP has achieved its objectives spectacularly.

In the short time, the CSMP has provided a real sustainable and long-term benefit to the dairy industry. After all, if the CSMP were to shut down tomorrow, the gains in hardware investments, milk production capacity, and better quality such as HACCP are permanent improvements. These benefits will continue serve the dairy industry of China for year to come.

The success of the CSMP does not hinge on massive financial injections but on the adoption of a good and practical policy, which take the best of both the public sector and the private. The CSMP model can be an attractive alternative for many developing countries interested in SMP.

### **Research methodology**

This study was undertaken by Mr. Chen Yu, Mr. Chen Lian Fang and Dr. Pang of Beijing Prime Dairy Research Institute. It was based on interviews; surveys and data analysis and projection techniques were based on the input output analysis technique, first developed by Mr. W Leontief, the Nobel economist of 1973.

This introduction paper was written by - Benjamin Lai FFDO, Tetra Pak.
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