

SCN Working Group on Micronutrients: Information Sharing Template for 2006 and Earlier Activities

Table 1: Demographic Information

Reporting Individual	Lilian Selenje
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Position	Project Officer (Health and Nutrition)
Department/Section	Health, Nutrition and Water/Sanitation
Major focus of activities	Support to others
Summary of activities	Unicef-China provides support to the main organizations responsible for gathering necessary evidence on existing vitamin and mineral deficiencies and what works in the context of China, development and implementation of policies and programmes for reducing deficiencies at national level and in particular in poor regions of China. These organizations include China Centres for Disease Control and Prevention, Ministry of Health and Public Nutrition Development Centre

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Table 2: Measurement, assessment, monitoring and reporting micronutrient deficiencies

Geographic area(s) covered by this table	China														
Project Name	IDD Elimination														
Supporting Agencies	UNICEF														
Approximate # of beneficiaries	1.3 billion people at national level														
	Micronutrients														
	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E
Activities															
Prevalence Assessment	x														
China conducts National IDD survey every 3 years and salt monitoring surveys annually. These are largely financed by the Government at different levels. UNICEF provides funding and technical support to poor regions of the country which need additional support for the surveys, and otherwise would not be represented. In addition to the salt monitoring surveys of 2006, UNICEF supported special assessment organized for very poor counties still having severe forms of IDD as indicated in the next response															
Monitoring and Evaluation	x														
Data from the survey described above is used for monitoring of process indicators, in this case iodised salt coverage over the years and evaluation of impact on iodine nutrition. UNICEF provides funding and technical support for this process to take place in the poor regions of the country and at national level. Special investigation teams were supported by UNICEF in 2006 for Tibet, Xinjiang and Qinghai. One of the outcomes of this exercise was the discovery of new cretins in Xinjiang, when at national level it was believed severe forms of IDD had been eliminated. This shows that you can have high iodised salt coverage above 90%, and still have severe forms especially in large and diverse countries, calling for more disaggregated analysis and reporting as indicated below. This discovery obviously heightened support by Central Government to pay closer attention to this problem in the poor regions															
Analysis and Reporting	x														
Unicef provides funding and technical assistance to improve analysis and reporting of data from the monitoring surveys to facilitate reporting of progress especially at lower levels in order to identify and take appropriate action in low coverage areas. Every year annual reviews are held supported by UNICEF to help analyse trends by county, identify constraints and make recommendations for improvement. These meetings allow exchange of knowledge and experiences between academic and research institutions with programme managers at national, provincial and for the first time this year selected high risk counties were included.															

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Table 3: Food Fortification

Geographic area(s) covered by this table	National for iodine and 4 villages in Gansu and Hebei Provinces, PR China
Project Name	1) IDD Elimination and 2) Trial on fortification of flour with iron and other micronutrients
Supporting Agencies	UNICEF, USCDC, Micronutrient Initiative
Approximate # of subjects or beneficiaries for each project described	IDD- is national scale 1.3b while Flour fortification is 1200 women

	Micronutrients														
	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E

Commodities

Salt	x														
Wheat		x	x	x		x				x	x		x		

Activities

Policy and Advocacy	x	x	x	x			x				x	x		x	
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Salt iodisation- In 2006 UNICEF supported a high level re-advocacy video conference that involved the Minister of health, high ranking officials from 11 ministries involved in IDD elimination, international organisations and provincial governors or their representative and the media. The purpose was to send a strong message of support to provinces still lagging behind or sliding back in coverage. A letter from Vice Premier Wu Yi was read at the same event. The concerned provinces are taking necessary measures to demonstrate progress.

Flour Fortification- with Fe, Zinc, folate, A, B1, B2, and Niacin. FFI jointly with UNICEF-China supported a high level advocacy meeting attended by government and related industry officials, international senior executives from, flour and related industries, FFI, development/academic institutions and UNICEF. A major outcome of this and past events was the inclusion of flour and rice fortification as one of the strategies in the 11th 5 year plan for improving food industry in China. This is considered a significant step towards large scale fortification in China. However because of the diversity in consumption/processing patterns, and implementation challenges, key players in China are not convinced about mandatory flour fortification. Their preference is to promote fortification of various foods using a market approach. This requires substantial consumer information and education to create demand for fortified products in an environment where consumers are very worried about food additives and food safety in general. If political leaders were interested in food fortification, it would help to speed up things, however, the challenge is to place fortification on the political agenda among other competing broader health priorities.

Unlike the case of iodine in salt which had high level and united international 'push' and high level political support, as well as funding support

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through UNICEF, for food fortification with other vitamins and minerals, we do not see similar advocacy efforts from organizations such as WHO, World bank, in addition to the effort of GAIN, FFI and UNICEF-China

Operational Research		X	x	x		x			x	x		x	
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Flour fortification- Following the community effectiveness trial described below, and in preparing for large scale fortification, UNICEF supported localized qualitative KAP study covering consumers, flour millers and government officials in a selected urban area and rural wheat growing area in Gansu Province. The study found that promotion of fortified flour in urban areas has more opportunities and fewer barriers compared to rural areas. Urban areas buy wheat flour, have heard about nutrition, benefits of vitamins and minerals. Although they are worried about food safety and capacity for monitoring by those responsible, given some assurance, they are willing to buy fortified flour as long as the price increase is not too much. In this particular rural area majority of households grow and also buy wheat and process at nearby-by small mills. They have very limited knowledge on nutrition and benefits of vitamins and minerals and hardly buy already processed flour. They also believe that their flour is more wholesome and fresh compared to already processed flour which may have additives. The situation in rural areas that do not grow wheat but buy fortified flour could be more favourable to promotion of fortified flour. Another KAP study was conducted in such areas and analysis is underway.

Millers on the other hand were worried about safety of fortificants, whether deficiencies existed in the community, effect on flour qualities and consumer preferences, reaction of consumers, cost of fortificants, reaction with bleach which is commonly used in China. The study concluded that fortified flour should be promoted among millers and consumers in urban areas and that in rural areas there is a need to develop special models that would suit these areas or explore fortification through another potential food vehicle.

Communication Support		x	x	x		x			x	x		x	
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Following the qualitative study, UNICEF and USCDC provided technical and financial assistance for the development of creative briefs which defined the recommended communication strategy for consumers, millers and government officials, and the development of communication materials.

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Table 3 (continued) Food Fortification:

	Micronutrients														
	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E
Activities Cont.)															
Fortification project size															
Community Effectiveness Trials		x	x	x		x				x	x		x		
<p>Fortified flour: Since 2002-2006 UNICEF has been supporting a trial to evaluate the effectiveness of flour fortified with elemental Fe, Zinc, folate, A, B1, B2 compared to a control group, and flour fortified with a similar fortificant but containing FeEDTA also compared to a control group. The former trial was conducted in Lanzhou city while the later in Weichang, Hebei province. Project participants received subsidized flour during the trial period. The trials received funding and technical support from Lanzhou City, UNICEF and USCDC, and premix support from Sight and life and DSM. Analysis and report writing are underway. Preliminary results show significant reduction in VAD in both groups using fortified flour and significant reduction in anemia in the group using flour fortified with FeEDTA. The trial not only helped to develop capacity among millers and government officials responsible for Quality assurance and control but also led to greater confidence among leaders and related private sector at national and local level. It gave the opportunity to adapt fortification procedures to ensure that key consumer preferences were not seriously affected. For instance Mantos (Chinese steamed bread) made from fortified flour initially had more visible yellow spots apparently as a result of niacin. The China CDC has worked with DSM to reduce this effect as consumers in China value whiteness in flour products. With explanation from local leaders, consumers understood this result and continued to use fortified flour provided by the project. The final report is expected in 2007.</p>															
Pilot Interventions		x													
Targeted Fortification															
In-home fortification (complementary foods)		x													

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Table 4: Vitamin and Mineral Supplementation

Geographic area(s) covered by this table	50 counties in 12 provinces														
Project Name	Mother and child health Programme														
Supporting Agencies	UNICEF/Ministry of Health														
Approximate # of subjects or beneficiaries for each project described	885,000 children 6-36m														
	Micronutrients														
	Iodine	Iron	Folate	Zinc	Calcium	Vit A	Vit B-12	Vit C	Vit D	Vit B-1	Vit B-2	Vit B-3	Vit B-6	Vit K	Vit E
Activities															
Prevention Program						x									
UNICEF provides vitamin A supplements for children 6-36m in 50 UNICEF supported counties, distributed through the Ministry of Health. It is one of the high impact interventions that UNICEF is supporting to improve child survival in poor regions of china still having high child mortality rates.															
Supplementation project size															
Efficacy Trials		x	x	x		x		x	x	x	x		x		x
Since 2002 UNICEF supported an efficacy trial by Xian Jiaotong University on effect of multiple micronutrient supplementation of pregnant women on low birth weight and other birth outcomes. The study was conducted in 2 counties of Shaanxi province. There were 5828 pregnant women enrolled project and 4771 infants born alive. A total of 561 villages were randomised to three treatments in which pregnant women received daily supplements of folic acid (control), iron and folic acid, or multi-micronutrients. The formulation of the multi-micronutrient supplements was based on the required dietary allowances for each of the micronutrients. The iron/folate supplements contained 60 mg of iron and 400 µg of folic acid. The folate supplement contained 400 µg folic acid. Data collection was completed in 2006 and final report is expected soon.															
Community Effectiveness Trials		x	x	x		x		x	x	x	x		x		x
UNICEF had planned to conduct a large scale effectiveness trial to supplement pregnant women and children born to these women from 6 months of age till they reach 3 years of age. The trial would be implemented by Ministry of health but has not started yet because of several limitations, including funding to buy the supplements. In preparation for this project, there is a controversy on which formulation to use. The formulations that have been used so far in efficacy and effectiveness studies are not yet accepted for use in programme situations for safety reasons. On the other hand there are no efficacy or effectiveness studies that used the recommended levels which have very low levels of iron for pregnant women about 10mg and there are questions on whether such levels can benefit the target group significantly.															

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<i>National/Regional Program</i>																	
Supplement's Primary Distribution																	
<i>Through Public Channels</i>																	
See under prevention programme																	
Supplementation Targeted Groups																	
<i>Pregnant women</i>																	
See under efficacy trial																	
<i>Children 6-24 months of age</i>																	
See under prevention and																	