



Asian Development Bank  
Japan Fund for Poverty Reduction



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JFPR 9052 Regional Project  
Sustainable Food Fortification in Central Asia and Mongolia

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## **QUARTERLY PROGRESS REPORT**

**January-March 2006**

**RCAO, Almaty  
May 2006**

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## A. Background

1. The governments of Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan, and Uzbekistan aim to eliminate iodine deficiency disorders (IDD) and reduce iron deficiency anemia (IDA) and folic acid deficiency. These deficiencies are more common in Central Asia than many other developing countries. Iodine deficiency has a negative impact on brain development of the fetus, while iron deficiency constrains cognitive development of young child, and hampers mental and work performance of the older child and adult. Negative effects of iodine and iron deficiency at a young age are irreversible and affect school achievement and later productivity. Iron deficiency is also a major contributory factor for maternal mortality. Folate deficiency, prevalent in these countries, causes neurotube defects in infants. These deficiencies have a major impact on the educability and productivity of large segments of the countries' populations, straining education and health systems, lowering productivity, and raising levels of sustained poverty.

2. The Japan Fund for Poverty Reduction (JFPR) 9005 Regional Project<sup>1</sup> (2001-2004) has focused support on the six Central Asian countries in transition economy period: Azerbaijan, Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan. JFPR 9005 aimed to mitigate IDD and IDA through salt and wheat flour fortification. Most of the activities were focused on a few pilot provinces in each country. Due to the direct and catalytic effects of JFPR 9005, these countries have moved toward universal salt iodization (USI) and begun fortifying wheat flour. After a decade of limited success in attempts to iodize salt and reduce iron and folate deficiencies, JFPR 9005 created an environment of national commitment and activities focusing on these key nutritional issues. The substantial increases in iodized salt production and the passage of supporting legislation was achieved in all participating countries. Only the Kyrgyz Republic had USI legislation at the beginning of JFPR 9005, Tajikistan enacted USI legislation in 2002, and Kazakhstan and Mongolia in 2003. Uzbekistan is drafting similar legislation. The iodization level has been adjusted to the world standard. Most of the salt industries have made a significant progress in arrangements for self-procurement of potassium iodate. Each country was able to obtain the necessary regulation that allowed fortification equipment and fortificants to be brought to the country and for fortified flour to be produced and sold. While these significant achievements have convinced the governments and private owners of salt industries and flour mills that USI and substantial wheat flour fortification are possible, the governments and private sector also know that these achievements may be lost if not made firm and sustainable. The JFPR 9005 experience has helped the governments and private sector identify steps required for sustainable food fortification, and also clarify what more needs to be done.

3. In July 2004, the Asian Development Bank (ADB) approved for grant assistance two million US dollars under JFPR regional project<sup>2</sup> for five Asian Countries in Transition (ACT)<sup>3</sup>. The goal of the Project is to reinforce and sustain the reduction of IDD and IDA and folic acid deficiency among poor children and women in Central Asia through parallel attention to supply (production and distribution); demand (public awareness and demand creation); and regulation (quality control, implementation of regulations and legislation, and trade facilitation). The specific objectives are to (i) obtain and sustain use of iodized salt by 90% of households; (ii) sustain fortification of at least one third of wheat flour consumed domestically; (iii) build capacity of the private and public sectors to produce quality fortified food; (iv) develop regulatory institutions or incentive schemes to facilitate fortification and ensure the trade of quality fortified food among Central Asian countries; and (v) build awareness of consumers about prevention of IDD and IDA, and benefits of micronutrient-enriched food.

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<sup>1</sup> ADB, 2001. *Improving Nutrition for Poor mothers and Children in Asian Countries in Transition*.

<sup>2</sup> JFPR 9052 – *Sustainable Food Fortification in Central Asia and Mongolia*, approved on 22 July 2004.

<sup>3</sup> Republic of Kazakhstan, Kyrgyz Republic, Mongolia, Republic of Tajikistan, and the Republic of Uzbekistan.

4. The JFPR Project has four major components:

- (i) Strengthening of the capacities of salt industries and flour mills;
- (ii) Strengthening of the capacities of the Government;
- (iii) Social mobilization and poverty targeting;
- (iv) Project management, monitoring and evaluation.

5. In contrast to the pilot nature of JFPR 9005, the Project will primarily build capacity of the public and private sectors to sustain food fortification. The Project will focus on sustaining salt and flour fortification, which JFPR 9005 has proven technically feasible. The Project will work with the private sector and government agencies nationwide rather than in a few pilot districts. The Project will help the private salt enterprises and flour mills access information, and tender and procure fortificants and equipment by themselves. The Project will also deal with the difficult issue of premix procurement by establishing links between global producers of premix and by encouraging production of premix within the region. The Project will also strengthen and upgrade the quality assurance system of public and private sectors to ensure that consumers receive fortified food that meets quality standards.

6. An enhanced and expanded social-marketing campaign, joining millers with civil-society groups and the media, will greatly increase demand for the new fortified wheat flour and its products, especially among poor families who are at greatest risk from IDA. The Project will also help consumers monitor the quality of iodized salt. Universal salt iodization will ensure that the poor will have access to quality iodized salt. Fortified flour has been sold at the same prices as unfortified flour. To increase access of poor and rural households to fortified flour, the Project will review how it is distributed, and support testing cost-effectiveness of different means of fortification, including flour fortification at smaller mills and use of fortification packets at home.

## **B. Technical/Project Components**

### B.1 Regional Meetings, Conferences and Workshops

7. On 22-24 August 2005, Regional Coordination Communication Office (RCAO) conducted the regional information meeting on the communication strategy and project management<sup>4</sup> in Bishkek, Kyrgyz Republic. Country Project Offices (CPOs) presented the country communication strategies and the outlines of communication/social mobilization plans. Mr. Gary Gleason, Director, Communications Department of Iron Deficiency Project Advisory Service (IDPAS) and JFPR Consultant, facilitated the information meeting and shared the overview of successful communication/social mobilization strategies on nutrition/food fortification. The major operational stages and elements of a communication strategy framework should include: (i) identification of the most important audiences for targeting with communication activities; (ii) identification of any additional research and information gathering that is needed and to complete the strategy and planning for any such research; and (iii) selection of an effective mix of channels to reach the target audiences. The importance of a well-considered management plan for the communications strategy was stressed. The management plan should also include the component for monitoring the implementation of activities to see how well they are working and how to use feedback from audiences to make adjustments on the subsequent rounds of messages and activities in support of fortified food products.

Comment: C

8. The participants discussed the issues of food fortification advocacy, effectiveness of various communication messages and its delivery to target groups. It was noted that the prevalence of IDA, IDD, folic acid deficiency, group B vitamins and zinc deficiency is still high in the Central Asian countries; current food products technologies are micronutrient depleting and good quality food products still are not available to the majority of the population. It was

<sup>4</sup> The meeting report can be obtained from ADB/RCAO on request.

also noted that food fortification is still not the priority for the food industry, and there was no visible shift of consumer's demand. The meeting defined the goals for the revised communication country strategies and criteria for the revised communication strategies and selection of local communication consultants, involvement of the efficient NGOs, communication campaign monitoring and ways of improving the Project website.

Comment: ?

9. The second conference of salt producers on sustainable quality iodization in central Asia and Mongolia (footnote 4) was held in Tashkent, Uzbekistan, on 22-24 November 2005. The conference had three objectives: (i) to improve the capacity of salt industries in Central Asia to produce quality iodized salt, thus helping to eliminate IDD in the region; (ii) to provide an opportunity to regional salt producers to present their products, knowledge and services; and (iii) to establish networks between the salt producers and suppliers of potassium iodate and equipment. The workshop brought together 64 participants from the five participating countries: Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan, including representatives of JFPR Project Steering Committees and Working Groups, experts on food quality control assurance, NGO leaders, coordinators and financial assistants. Special external sessions were devoted to the issues of project management and reporting. The grant implementation procedures regarding the procurement, engagement of consultants, auditing service and Project website development were reviewed to establish a set of recommendations for program improvement.

10. One of the key meeting objectives was to promote self-reliant input material procurement (potassium iodate, equipment and laboratory inputs) of salt producers to strengthen their role as partners in the national IDD elimination policies. The Salt Producers Associations and leading salt companies shared the experience of ongoing quality iodized salt production and presented the vision and activities needed to ensure sustainable quality salt iodization in Central Asia and Mongolia. JFPR project teams presented an overview of project contributions to USI in participating countries. Suppliers of iodization equipment (SERRA), salt test kits (MBI) and potassium iodate (Ajay-SQM, L-Pharma and Iodobrom), as well as UNICEF Supply Division made presentations on potassium iodate production and terms of supply, and participated in a trade show for interaction with country groups, associations and individual salt industry. Issues addressed during the sessions included management and procedures for product quality assurance; product marketing and promotion; input procurement; import/export tariffs, rules and regulations; and joint collaborative efforts in National Food Fortification Alliances (NFAs).

11. The participants agreed that the framework for regional cooperation is essential in achieving the goals of USI, and agreed to continue the dialogue between the salt producers/salt associations in the region and the NFAs. The NFA should lead partnership development among the public and private sectors and civil society, and more effectively combine the tax incentives for legal salt producers and the broad communication and education programs for the general public. During the final session, the final statement<sup>5</sup> was discussed and amended.

12. The regional conference on quality wheat flour fortification in Central Asia and Mongolia (footnote 4) was held in Almaty, Kazakhstan, on 7-9 February 2006. The objectives of the conference were: (i) to improve the capacities of flour milling industries in Central Asia and Mongolia to produce quality fortified wheat flour to mitigate iron deficiency anemia, folic acid deficiency, and other micronutrient deficiencies; (ii) to provide an opportunity for regional wheat grain and flour suppliers to present their products, knowledge and services; and (iii) to establish networks between flour millers and suppliers of premix and equipment (see Appendixes 4-5). The workshop brought together 127 participants from five participating countries: Kazakhstan, Kyrgyz Republic, Mongolia, Tajikistan and Uzbekistan. This amount included flour millers, international suppliers, international agencies and the International Association of Operative Millers, experts on the food quality control assurance and the

<sup>5</sup> The statement and other workshop documents can be obtained from the Project Web-sites: <http://www.adb.org/Projects/sustainable-food-fortification/default.asp> and <http://www.caffproject.net>

nutrition researchers from different countries. The conference aimed to help the participants update their knowledge on new technologies and information on fortified wheat flour production. The suppliers of premix and equipment, and partners of the flour milling and bakery industries exhibited their products and activities to the participants and possible purchasers, and attend the plenary sessions and panel presentations. The grant implementation procedures regarding the project implementation monitoring, auditing service and country annual evaluation workshops were reviewed to establish a set of recommendations for program improvement.

13. The meeting reviewed the overall progress in flour fortification in the project countries and discussed the most urgent issues, such as premix procurement and quality assurance of fortified foods. KAN, RCAO, and the country teams presented the status of IDA and results of the sentinel study. Associations of flourmills presented their vision on the ongoing wheat flour fortification and the obstacles, which operative flourmills in the region were facing. Issues addressed during the sessions included management and procedures for product quality assurance; product marketing and promotion; input procurement; import/export tariffs, rules and regulations; and joint collaborative efforts in NFAs. The dialogue between the international suppliers and flourmills has been successfully established. The issues of the regional cooperation and trade were discussed and the perspectives for strengthening the regional activities were highlighted. The meeting indicated the importance of the information and technical assistance exchange at the regional level. The harmonization of the legislation and trade procedures would require additional efforts and high-level advocacy and for that purposes the continuous partnership with the international development would be needed. During the final session, the conference statement (footnote 5) was discussed and amended (see at Appendix 6).

#### B.2. Strengthening the Capacities of Salt Industries and Flour Mills

14. From 2001 and within the framework of the JFPR 9005 Project (footnote 1) the multisectoral Country Teams from the participating countries each designed Country Investment Plans (CIPs), which were founded on a regional consensus regarding the need for regulatory and trade structures to support investment in fortification of food staples and proposed national food fortification programs to reduce the high prevalence of IDA and IDD. The country activities were developed through a collaborative process of cross-sector information sharing, identifying of priorities and recommended investments, capacity building, advocacy and public health analysis. The specific fortification projects outlined in the CIPs were identified on the basis of a feasibility analysis assessing industrial capacity and commercial potential in each country. The JFPR made the initial investment in establishment of production (purchase of the feeders and fortificants; training of the food producers on fortification technology and quality assurance and control issues) and the building of critical public systems, including regulation, monitoring, and public education and advocacy on the benefits of the fortified food products.

##### a) Fortified Wheat Flour Production

15. The Project strategy in wheat flour fortification resulted in the following outputs:

In 2001-2003

- design of common premix formulation for all participating countries;
- selection of the beneficiary flour mills and establishment of the regular wheat flour fortification and distribution;
- design and adoption of the standards on fortified wheat flour;

- establishment of the common quality assurance and control system to be applied at production sites and markets.

In 2004-2006

- design of legislation on wheat flour fortification at all participating countries;
- design and adoption of the fiscal incentives for flour millers;
- enlarging of the types of flour mills to introduce regular wheat flour fortification;
- establishment of the self-sustainable procedures on premix procurement;
- introduction of the adequate spectrophotometer methods in addition to the spot-tests to be followed by producers and control agencies.

16. The unique premix (KAP Komplex1) was formulated by the KAN with the help of nutritionists from participating countries and JFPR consultants. The source of iron was specified to be electrolytic elemental iron. In 2005 KAN started researches on additional premix formulations. The JFPR Project provided to all countries on co-shared basis the adequate amount of the KAP 1 Premix to be processed within 2002-2004. However, the production of the fortified wheat flour was lower than expected, and the stocks of the granted KAP Premix allowed countries to continue fortification programs within 2002-2006. Uzbekistan and Mongolia were the only countries to utilize the granted premix by the end of 2005 - early 2006. The purchase of the additional amount in Uzbekistan was made within the World Bank/GAIN Project. One local company in Kazakhstan piloted production of the KAP Komplex 1 and presented its findings to the flour millers in participating countries. The League of Grain Processors and Bakers of Kazakhstan (LGBK) conducted discussions on an establishment of a regional premix production and distribution site with international vendors.

17. The Country Teams started planning for the largest mills, preferably those with milling capacities greater than 200 MT/day. This was to optimize the amount of flour that would be fortified with are limited resources for equipment, as well as to increase the chances that the participating mills could produce a quality product, thinking that the larger mills would be more technically advanced. Unfortunately for the program, in 2002-2004 most of old FSU mills in many CIS countries (not just Central Asia) were barely operating and in very poor condition. There are a number of reasons for this including shortages of wheat, electricity, equipment in poor repair and lack of spare parts. These mills require a large amount of wheat to start up, that's why most of these mills are gradually being replaced by smaller, more efficient mills with newer equipment. Many of these mills are well suited for fortification, but because of their smaller size many were omitted from the first phase of the project. ADB agreed to support the procurement and installation of micro feeders at 17 medium scale mills in Kyrgyz Republic, 20 – in Mongolia and 15 – in Tajikistan in years 2004-2005. The selection involved the mills with the capacity of 20 tons per day capacity, as the wheat flour fortification seems to be uncertain at the lower-scale flour mills.

18. Each country managed to obtain the necessary regulations that allowed feeders and premix to be brought into the country and for fortified flour to be produced and sold, which was not easy accomplishment in the CIS countries. Kazakhstan and Kyrgyz Republic were able to eliminate or reduce tariffs and taxes on imported premix and feeders; most of the countries obtained technical or GOST standards on the KAP Komplex 1 premix and fortified wheat flour. Kazakhstan was the only country to introduce mandatory flour fortification legislation, which would start from the 1 July 2006.

19. Only Kazakhstan had established association of the flour millers before the Project's start. In 2003-2005 the associations of grain processors and fortified food producers were established in Tajikistan, Kyrgyz Republic and Mongolia.

20. In January-March 2006 the wheat flour fortification was ongoing in all participating countries, but Kazakhstan and Kyrgyz Republic have visibly reduced the amount of fortified wheat flour. However the dynamic of wheat flour fortification was still progressive. The number of participating flour mills was 39 (from 94 beneficiary flour mills which were selected by the Governments). The amounts of produced fortified wheat flour also were progressive and reached from 7 to 14 per cent of total desired amount (varying at different countries). Consolidated data on activities of JFPR Project beneficiary flour mills and production of wheat fortified flour can be found in Tables 1 and 2.

**Table 1. Activity of the Participating Flour Mills in 2004-2006**

Country (Flour Mills)	2004		2005		January-March 2006	
	Active industries	Fortified Flour Production(MT)	Active industries	Fortified Flour Production(MT)	Active industries	Fortified Flour Production(MT)
Kazakhstan (17)	13	121,418	12	88,387	6	19,073
Kyrgyz Republic (21)	8	31,429	9	13,513	13	5,910
<i>large-scale (7)</i>	8	31,429	6	8,991	6	3,710
<i>medium/small (14)</i>	-	-	3	4,522	7	2,200
Mongolia (27)	5	35,763	6	33,118	5	8,030
<i>large-scale (5)</i>	5	35,763	3	16,911	2	1,624
<i>medium/small (22)</i>	-	-	3	16,207	3	6,406
Tajikistan (15)	6	58,063	15	72,773	15	19,808
<i>large-scale (6)</i>	6	58,063	6	57,019	6	12,675
<i>medium/small (9)</i>	6	58,063	9	15,754	9	7,133
Uzbekistan (14)	14	336,260	14	36,859	-	-
<b>Total (94):</b>	<b>46</b>	<b>582,933</b>	<b>56</b>	<b>186,435</b>	<b>39</b>	<b>52,821</b>

MT = metric ton

Source: League of Grain Processors and Bakers of Kazakhstan; Association of Fortified Wheat Flour and Bakery Producers of Kyrgyz Republic; Association of Food Producers of Mongolia; Association of Salt Producers and Flour Millers of Tajikistan; Uzbekistan Country Project Office

**Table 2. Consolidated Data on the Production of Wheat Fortified Flour in 2004-2006**

Country	2004	2005	January-March 2006		
			Planned annual production (MT)*	Consolidated production (MT)	Consolidated production (%)
Kazakhstan	121,418	88,387	274,000	19,073	6.9
Kyrgyz Republic	31,429	13,513	71,000	5,910	8.3
Mongolia	35,763	33,118	79,200	8,030	10.1
Tajikistan	58,063	72,773	142,510	19,808	13.8
Uzbekistan	336,260	36,859	250,000		
<b>Total</b>	<b>582,933</b>	<b>244,650</b>	<b>816,710</b>	<b>52,821</b>	<b>6.4</b>

MT = metric ton

\* The planned amount was discussed between CPOs and the food industry on the basis of agreed ratio between the desired amount (33% of consumption amount) and the production capacity of the given flour mill (in metric tons).

Source: Country Project Progress Reports, 2004-2006

21. The project agreements stipulated that in 2003-2005 the beneficiary enterprises would share one-third of the costs of premix in order to develop the self-procurement capacity. The overview of the status of reimbursement is presented in Table 3 below. The flour millers in Kazakhstan and Mongolia had completed its commitment totally (the amount of \$297 left in Mongolia occurred due to the bankruptcy of one flourmill which could not pay for the utilized premix). In Uzbekistan the flourmills delayed payment of the reimbursement amount due to the launch of the GAIN project. In the Kyrgyz Republic, where the flour millers did not provide payments in spite of continuous appeals of the Government and the Project Team.

**Table 3. Co-sharing of Premix Costs by Flour Mills in 2003-2006**

Country	KAP Premix (tons)	Costs of KAP Premix (\$)		Actual Reimbursement	
		Total	Co-shared Amount Due	Total (\$)	% to Amount Due
Kazakhstan	95.0	483,408	160,423	160,423	<b>100.0</b>
Kyrgyz Republic	15.0	84,028	27,720	292	<b>1.1</b>
Mongolia	8.0	60,000	20,000	19,803	<b>98.8</b>
Uzbekistan	89.0	431,889	129,567	84,595	<b>65.3</b>
<b>Total</b>	<b>207</b>	<b>1,059,325</b>	<b>337,710</b>	<b>265,113</b>	<b>78.5</b>

Source: Country Project Progress Reports, 2004-2005.

Note: Tajikistan beneficiary enterprises were exempted from reimbursement.

22. In Mongolia the Country Team decided to use the co-shared funds to purchase the 4.1 metric tons of premix, and additional 4 metric tons were procured by the leading flour milling company from its funds.

### Kazakhstan

23. The production of fortified wheat flour was hindered at most of the participating wheat flour mills, only six flour mills (from 17) continued the wheat flour fortification and produced 19,073 tons of wheat flour. However in Western Kazakhstan the production of the fortified wheat flour is conducted on regular base and the fortified wheat flour is affordable at the local market. The Project Team discussed the issues with the flour millers and they named the lack of demand as the main reason for low production of the fortified wheat flour. The industry shared the costs for training of the laboratory technicians. The procedures for procurement of premix and feeders by flour milling industries were established and more than 20 feeders were purchased in 2005 by the flour millers themselves. Three flour milling companies arranged the continuous advertising of the fortified wheat flour through TV-spots on their own funds.

24. The Project team continued discussions with the Ministry of Agriculture and the Ministry of Industry and Trade in order to secure the existing legislation on mandatory wheat flour fortification (which would enter into force from 1 July 2006).

25. The LGBK discussed with UNICEF/GAIN the tasks and arrangements for 4 additional information workshops for medium-size flour millers in different areas in order to provide adequate information on the technical feasibility of wheat flour fortification and quality control

at different types of the flour mills.

### Kyrgyz Republic

26. The actual production of fortified wheat flour was 5,910 tons only at 13 flour mills from the 21 participating enterprises. The flour millers linked the low amount of fortified wheat flour production to political transition, lack and low quality of wheat grain, large trading amount of imported wheat flour at local markets, and lack of demand of fortified wheat flour by consumers. The Project Team designed the proposals on transferring the micro feeders and premix from non-working flour mills to other industries. These proposals should be considered by the NFA at its next meeting.

27. The Ministry of Agriculture noted that the new country strategy in sustainable wheat flour production would mainly rely on the domestic wheat grain, and the estimated crops would be enough to meet the annual country demand. The Ministry expected that while the production in 2006 will be at the same level (1,058 thousand tons), the import of the wheat grain will be increased up to 200 thousand tons. The 'Healthy Food' logo is used by 7 flour mills and 7 more are preparing to use it. The Association of the Producers of Fortified Wheat Flour and Bakery conducted the training in March 2006 in Southern Kyrgyzstan on the technology and quality control on wheat flour fortification.

28. Despite the continuous discussions between the Ministry of Health, CPO, and the participating flour mills, the reimbursement of the one-third of premix costs did not start in the Kyrgyz Republic in the reporting period.

### Mongolia

29. In Mongolia the wheat flour production is heavily import depended, as the domestic wheat grain production covers only one-third of demand. The shortage of the wheat grain and negative impact of the transition to market economy affected the production of wheat flour at the majority of the flour mills. The Mongolian Food Producers Association estimates the import of wheat flour up to 60-70% of annual demand. The lack of turnover funds at small-size flour mills contributes to the lower wheat flour production. Five flour mills (of 25 beneficiary industries) produced 8,030 tons of fortified wheat flour in the reporting period. Only five flour mills use the 'Healthy Food' logo. Still the commitment of the participating flour industries was quite visible. The Altan Tariya Company (the leading flour mill which produces the 20% of the annual national wheat flour production) has purchased additional 4 tons of KAP Premix from its funds; and the Project Team purchased 4.1 tons of KAP Premix from the reimbursement funds. The Food Producers Association continued the attempts to reduce the VAT on wheat flour production. Two domestic consultants on wheat flour fortification technology were contracted by the Project and provided valuable contribution in installation and calibration of the Chinese micro feeders.

### Tajikistan

30. In Tajikistan the wheat flour production is import depended, as the domestic wheat grain production covers only 50% of demand. In order to ensure the fortified wheat flour production, the Project supported procurement and installation of 12 micro feeders at medium-size flour mills and 3 small-size flour mills. In reporting period all beneficiary flour mills were processing the fortified wheat flour, and the total production was 19,808 tons. The lack of turnover funds at flour mills and inadequate reporting contribute to the lower wheat flour production. The Project supported printing of 'Healthy Food' logo for 200,000 bags, but this good initiative was followed-up by a few flour mills only. The domestic consultant on wheat flour fortification technology was contracted by the Project through Association and provided valuable contribution in installation and calibration of the micro feeders.

b) Salt Iodization

31. Contrary to the wheat flour fortification, the universal salt iodization was implemented by all participating countries since 1970s. The collapse of the former URSS created an unpredicted gap in supplies of the potassium iodate and adequate functioning of the salt industry. The joint assistance campaigns launched by UNICEF in cooperation with other international agencies since 1994 resulted in the significant improvement in the production of iodized household salt and its supply among poor populations of the JFPR Project participating countries. The salt iodization at the beginning of the Project was that the household use of iodized salt varied from 19% to 30%, and by 2006, the consumption level reached the level of 90% in Kazakhstan and Kyrgyz Republic, 75% in Mongolia and Tajikistan and 67% in Uzbekistan.

32. The Project strategy in quality salt iodization resulted in the following outputs:

In 2001-2003

- design and adoption of the USI laws and adequate standards on quality iodized salt;
- selection of the leading salt industries and establishment of the regular quality salt iodization and distribution;
- establishment of the common quality assurance and control system to be applied at production sites and markets.

In 2004-2006

- design and adoption of the fiscal incentives for salt producers;
- establishment of the self-sustainable procedures on potassium iodate procurement;
- introduction of the adequate quality control methods in addition to the spot-tests and titration to be followed by producers and control agencies.

33. JFPR project support was directed at the policy process of legislative and regulatory enactments, which led to harmonious salt iodization laws in all countries except Uzbekistan. Attendant regulations on taxes and tariffs were enacted in Kyrgyz Republic and Kazakhstan, and iodized salt standards at  $40\pm 15$ ppm iodine were promulgated in all countries. Chemical supplies and equipment were provided for salt and urine measurement; numerous rapid salt iodine field tests were performed at salt enterprises, retail outlets and in households. JFPR Project financed a series of capacity building events and workshops, and it supported the design, development and printing of numerous communications and media materials, targeted at a wide array of beneficiary groups, learner audiences and stakeholders. National and international expert advice and travel was fielded on explicit need, and strong admin-finance support was maintained throughout. The nature of support in establishing policy instruments, technology, capacity-building can serve as a model for similar programs aiming to reach the global IDD elimination goal.

34. ADB continued maintaining close working relationships with UNICEF also in Project execution. To facilitate decisions on investments in salt iodization, UNICEF arranged for salt situation assessments in participating countries. UNICEF project officers in each country assisted in project activities design, and coordinated the exchange of information among partners and the country team members. UNICEF recruited a micronutrient assistant project officer in each of the country offices of Central Asia and trained them in the specifics of food

fortification, with special reference to the aims and anticipated progress of the Project. UNICEF and JFPR supported an establishment of the Salt Producers' Associations in all Central Asia Countries and Mongolia. In summary, the blending of talents in collaborative support has continued among various supportive agencies in the many efforts during the Project period, including strategy analysis, capacity development, monitoring support and technical exchanges.

35. In January-March 2006 the quality salt iodization was ongoing in all participating countries. The amounts of produced iodized salt also were progressive and reached from 17 to 23 per cent of total desired amount (varying at different countries). Consolidated data on activities of JFPR Project beneficiary salt industries and production of quality iodized salt can be found in Tables 4 and 5 below.

**Table 4. Activity of the Participating Salt Industries in 2004-2006**

Country (Salt Industries)	2004		2005		January-March 2006	
	Active industries	Iodized Salt Production(MT)	Active industries	Iodized Salt Production(MT)	Active industries	Iodized Salt Production(MT)
Kazakhstan (2)	2	62,975	2	66,494	3	15,199
Kyrgyz Republic (6)	6	11,735	6	12,051	6	2,633
Mongolia (26)	23	7,057	21	5,694	18	1,158.4
Tajikistan (4)	3	22,588	4	30,475	5	8,656
Uzbekistan (13)	13	43,004	13	66,595	13	12,835
<b>Total (51):</b>	<b>47</b>	<b>147,359</b>	<b>46</b>	<b>181,309</b>	<b>45</b>	<b>40,481</b>

MT = metric ton

Source: Associations of Salt producers of Kazakhstan, Kyrgyz Republic, Mongolia; Association of Salt Producers and Flour Millers of Tajikistan; Uzbekistan Country Project Office

**Table 5. Consolidated Data on the Production of the Iodized Salt in 2004-2006**

Country	2004	2005	January-March 2006		
			Planned annual production (MT)*	Consolidated production (MT)	Consolidated production (%)
Kazakhstan	62,975	66,494	72,200	15,199	21.0
Kyrgyz Republic	11,735	12,051	15,200	2,633	17.3
Mongolia	7,057	5,694	5,940	1,158.4	19.5
Tajikistan	22,588	30,475	39,650	8,656	21.8
Uzbekistan	43,004	66,595	70,000	12,835	18.3
<b>Total</b>	<b>147,359</b>	<b>181,309</b>	<b>202,990</b>	<b>40,481</b>	<b>19.9</b>

MT = metric ton

\* The planned amount was discussed between CPOs and the food industry on the basis of agreed ratio between the desired amount (33% of consumption amount) and the production capacity of the given flour mill.

Source: Country Project Progress Reports, 2004-2006

36. The project agreements stipulated that in 2003-2005 the beneficiary enterprises would share one-third costs of premix in order to develop the self-procurement capacity. In Kazakhstan and Mongolia the participating salt companies had completed its commitment; however in Kyrgyz Republic and Uzbekistan the salt producers delayed payments. The overview of the status of reimbursement is presented in Table 6 below.

**Table 6. Co-sharing of Premix Costs by Salt Industries in 2003-2006**

Country	Potassium Iodate (tons)	Costs of Potassium Iodate (\$)		Actual Reimbursement	
		Total	Co-shared Amount Due	Total (\$)	% to Amount Due
Kazakhstan	3.25	52,065	17,355	17,355	100.0
Kyrgyz Republic	1.0	15,140	4,996	4,746	79.3
Mongolia	0.2	3,068	1,023	1,023	100.0
Uzbekistan	3.9	60,372	18,112	12,869	71.1
<b>Total</b>	<b>8.35</b>	<b>130,645</b>	<b>41,846</b>	<b>35,993</b>	<b>86.0</b>

Source: Country Project Progress Reports, 2004-2006.

Note: Tajikistan beneficiary enterprises were exempted from reimbursement.

### Kazakhstan

37. The salt iodization in Kazakhstan is based on the Law on IDD Prevention and national standard on the iodized salt, which have been adopted in October 2003. The law is supported by the set of President's Decrees, Government Decrees and Regulations, and national programs on IDD prevention. In order to facilitate the quality salt iodization the Government adopted several measures including: the elimination of taxes and tariffs on the potassium iodate and salt iodization equipment; and urging the procurement of the iodized salt by the health and children institutions from the public funds. The procedures for self-procurement of the potassium iodate, fortification equipment and packaging supplies were established and successfully implemented by the salt producers for the recent two years. The 'Healthy Food' logo is used by main salt companies. According to the preliminary marketing survey data (funded by UNICEF) the consumption of the iodized salt at households reached 90%.

38. The annual demand of the iodized salt is about 85,000 tons. There are two main salt companies in Kazakhstan: Araltuz Company and Pavlodarsalt Company, which are capable to cover the country demand. The consolidated data of production and import of the iodized salt in 2005 showed the amount of 104% from the annual country demand. In the reporting period the third salt company in Southern Kazakhstan joined the Project Team. The consolidated production of the iodized salt reached 15,199 tons (21% of the annual demand).

### Kyrgyz Republic

39. The salt iodization law was adopted in 2000 and is supported by the set of President's Decrees, Government Decrees and Regulations, and national programs on IDD prevention. The annual demand of the iodized salt is 18,000 tons. There are 19 salt companies in Kyrgyz Republic, and 14 of these companies have joined the Association of Salt Producers. The domestic production of the iodized salt in 2005 was 12,051 tons (in 2002 – 10,450 tons including non-iodized salt), and the import of the iodized salt was 7,000 tons or 36.7% of total amount. The consolidated data of production in the reporting period was 2,633 tons (17.3%). According to the preliminary marketing survey data (funded by UNICEF) the consumption of the iodized salt at households reached 95%.

40. The procedures for self-procurement of the potassium iodate, fortification equipment and packaging supplies were established and implemented by the salt producers for the recent year. In 2005 the salt companies purchased 718 kilograms of potassium iodate (50% of the annual demand) for the sum of \$19,289 from its own funds. In 2006 the self-procurement of potassium iodate already reached 470 kilograms (\$14,100). The 'Healthy Food' logo is used by 13 salt companies and three more are preparing to use it. The Salt Producers Association was established in 2003 and comprise of the limited amount of salt production companies and mostly trading companies which iodize, pack and sale imported non-iodized salt. The Association conducted several trainings for salt producers on the

issues of technology of salt iodization and quality control at industrial site.

### Mongolia

41. Mongolian salt industry consists of 10 small salt companies in remote areas, two medium-size companies which process the domestic salt from salt deposits. This production makes 835.3 tons (8.9%) per year. The four companies in Ulaanbaatar process the imported salt from China, and this production makes 8,380 tons (88.8%). About 217.7 tons (2.3%) of salt is non-iodized and used for technical purpose in various industries. In addition each central hospital in remote areas was equipped with JICA support with the simple iodization equipment to process the small amounts of the domestic salt.

42. While annual demand of Mongolia is about 9,430 tons, the project beneficiary enterprises produced 1,158 tons of iodized salt in the reporting period (which is 19.3% of planned amount). The procedures for self-procurement of the potassium iodate and fortification equipment were not established, as the stocks of potassium iodate needed are enough to meet 2006-2007 demands. The 'Healthy Food' logo is used by most of salt companies. Still the quality of domestic salt produced in most of other local sites did not comply with the national standard, and the content of iodine was reduced due to the high humidity. The Salt Producers Association conducted activities in establishment of the adequate quality control and assurance at the industrial sites. However there were no mechanisms to withdraw the non-adequate salt from the market.

43. The Ministry of Food and Agriculture proposed expressed its vision on establishment of the modern and large-size enterprise to process the domestic salt. The Ministry proposed the amendments to the Mining Law in order to strengthen the responsibility of the individual entrepreneurs on operation of salt deposits and ban of the dissemination of the non-iodized salt. The Salt Association presented the positive results at Uvs and Zavkhan salt enterprises which demonstrated that the cost-effective solutions could significantly improve the quality of the iodized salt. The production of quality iodized salt at Uvs salt deposit increased from 7.5 tons in 2002 to 118.5 tons in 2005, and the salt company contributed 4.5 mln tugrics (\$3,797) in addition to the JFPR grant of 6.6 mln tugrics (\$5,570).

### Tajikistan

44. The salt industry consists of three main enterprises and the newly established company in Vose area, which collects salt from small individual salt producers (more than one hundred independent miners) and processes its iodization and packaging. The annual demand of the Tajikistan in iodized salt is 32,000 tons, and the three well established salt enterprises produce 30,000 tons accordingly. The production of iodized salt was 8,656 tons (19.8%) in the reporting period. The quality of the iodized salt production at Yavan Salt Enterprise was adequate to national and international standards, while the quality of salt produced at Vose and Asht enterprises had comments from the Tajikistan Standard Agency. The reason was the old-fashioned equipment which did not allow the enterprises to produce of high quality salt, and sometimes the iodine content was decreasing due to high humidity of salt. While all three enterprises can cover the annual demand of the country, only 40-45% of produced salt was demanded at the domestic markets.

45. The national legislation on salt iodization was in place, but there were no further amendments in order to strengthen the law implementation and also adoption of penalties on distribution of non-iodized salt. This led to the high proportion of the non-iodized salt at the market, especially in Khatlon Province where the open salt deposits are located. In order to improve the situation, the Ministry of Health has initiated the dialogue with individual entrepreneurs and local authorities in Khatlon Province in June 2005, but the results of monitoring in Khatlon in March 2006 revealed the same status. 75 individual entrepreneurs were distributing the non-iodized and non-adequate raw salt to the traders and there were no measures implemented by the local authorities. The newly established enterprise which was supposed to collect the salt from these salt deposits for iodization did not get the salt for

processing.

46. The survey on consumption of the iodized salt, which was conducted in May 2005 in the framework of the ECD Project in Khatlon Province, showed that while 82% of households were purchasing the iodized salt, the iodine content was non-adequate in 70% of samples (less than 15 ppm), and almost absent in 29% of samples. SES reported on the cases of the false salt packages (when non-iodized salt was marked as properly iodized, including the 'Health Food' logo). However there were no adequate mechanisms to withdraw the non-iodized salt from the market.

47. The Association discussed with the Ministry of Industry and Trade and the Antimonopoly Agency the issues of banning the trade of the non-iodized salt at the market. The Antimonopoly Agency also reported on the cases of illegal distribution of non-iodized salt by the legal traders, who got the licenses on salt packaging and distribution.

48. The procedures for self-procurement of the potassium iodate and fortification equipment were not established, as the stocks of potassium iodate needed are enough to meet 2006 demand. Still the 650 kilograms of the potassium iodate were purchased by the salt companies from the Association. Now the Association started negotiations with international suppliers in order to make contracts for future shipment. There is a doubt whether the salt producers would buy the potassium iodate due to the high price. The 'Healthy Food' logo is used by most of salt companies, and packaging supplies are procured by the salt companies on regular basis.

### Uzbekistan

49. In the reporting period, 13 participating salt companies produced 12,835 tons of iodized salt. The procurement of potassium iodate was discussed among the MOH, Association of Salt Producers and UNICEF Country Office. UNICEF made the initial purchase of 2.9 tons of potassium iodate, now the specialized agency under the Ministry of Health was distributing it between the salt enterprises on the agreed price.

## B.3 Strengthening of the Capacities of the Government

### a) Legislation and Regulations on Fortified Food

50. *Kazakhstan* had adopted the Universal Salt Iodization Law and the national standard on the quality iodized table salt in 2003. The wheat flour fortification is based on article of the Food Safety Law (entered into force in April 2004), which mandates the fortification of the premium and first grade wheat flour. The Government has adopted the schedule of introducing the wheat flour fortification which stipulates that the mass production of the fortified wheat flour would start from the 1 July 2006 at the big flour mills, from 2007 at medium-size flour mills and from 2008 at other types of the flour mills. The certification of the fortified wheat flour can be made by two different ways: (i) in case of occasional wheat flour fortification the flour mill should certify each production consignment; (ii) in case of mass wheat flour fortification the enterprise may be certified as a whole on annual basis. KAN and the LGBK have designed and adopted the intermediate standards on the KAP premix and fortified wheat flour. Also the framework national standard on the wheat flour has been adopted, which incorporates the provisions on wheat flour fortification.

51. The need for the mandatory wheat flour fortification was contested by several big flour millers, the Ministry of Agriculture, the Ministry of Industry and Trade and the leaders of the Consumers' Federation. The main arguments were indicated as following: free choice of consumer, lack of evidence of side effects of the mass iron fortification for different population groups, lack of capabilities of the majority of flour mills to make initial investments in fortification equipment and purchase of fortificants, and establishment of the internal quality control on fortification. The Ministry of Agriculture and the Ministry of Industry and

Trade also mentioned that according to the international experts (EU/TACIS program on assistance to Kazakhstan on joining to WTO) the introduction of the mandatory wheat flour fortification could introduce barriers on free trade of wheat flour. The Ministry of Agriculture proposed the amendments in order to replace the mandatory wheat flour fortification with voluntary wheat flour fortification and submitted it at the end of March 2006 for Government's and further Parliament's consideration.

52. The Universal salt Iodization Law was adopted by the *Kyrgyz Republic* in 2000. The Government has adopted the National Program on IDD Reduction for the period of 2003-2007 and issued several degrees in order to strengthen the control on import and trade of the non-iodized salt. The national standard on the quality iodized table salt stipulates the adequate iodine content ( $40\pm 15$  ppm), and the special sanitary regulation (SanPIN) on the production, shipment and trade of the iodized table salt has been entered into force. The Parliament of the Kyrgyz Republic has adopted the law on mandatory wheat flour fortification already in 2004, but it was rejected by the President of the Kyrgyz Republic in the view of possible concurrence to the World Trade Organization (WTO) procedures (The Kyrgyz Republic is the WTO member country). The revised draft was submitted to the Parliament in May 2005 and it is scheduled for consideration in June 2006. The national standards on the fortified wheat flour and fortification of the wheat flour from domestic wheat grain were adopted. The Government also adopted several regulations in order to promote the demand on the fortified wheat flour: the preferential procurement of the fortified wheat flour from public funds, and the mandatory fortification of the flour to be processed from the State Reserve Fund. The Ministry of Education instructed all educational institutions on mandatory use of the fortified wheat flour and iodized salt for school breakfasts and lunches. However, the implementation of these regulations is still weak.

53. The Law on the Technical Regulation, which was adopted in 2004, in the view of WTO requirements, has changed the national legislative framework on standards and technical requirements. The Ministry of Industry, Trade and Tourism is authorized on harmonization of the legislation with the WTO procedures. It presented the comments on the revised draft on wheat flour fortification law, but in general the Ministry's position was neutral.

54. *Mongolia* had adopted the Universal Salt Iodization Law and the national standard on the quality iodized table salt in 2003. The adequate standards on the iodine content in salt were adopted already in 2001. The wheat flour fortification is based on article 5.1.6 of the Food Law (entered into force in October 1999), which requires the sustain use and fortification of food staples through adequate internationally recognized technologies in order to prevent the micronutrient deficiency. The Government has adopted the essential standards to ensure the adequate fortification, and quality control on the fortified food products. The certification of the fortified food products stays with the Specialized Control Agency.

55. The CPO started promising discussions with the Parliament in order to ensure the introduction on the adequate food fortification mechanisms and mandatory wheat flour fortification. The Ministry of Food and Agriculture (MOFA) proposed to reduce the VAT on wheat flour production to 5% (from existing 15%) while using the imported wheat grain, and to zero level – on wheat flour from domestic wheat grain. The Ministry of Finance was reluctant to this proposal and agreed to reduce the VAT to 10% only. The ADB support for establishment of the salt basins and improvement of the quality of domestic salt production was highly evaluated and the Parliament's Food Committee agreed to provide support on dissemination of this positive experience at two salt deposits.

56. *Tajikistan* had adopted the Universal Salt Iodization Law in 2002 and the national standard on the quality iodized table salt in 2004. Still there were no further amendments in order to strengthen the law implementation and also adoption of penalties on distribution of non-iodized salt.

57. The Project Team indicated the development of the mandatory wheat flour fortification

legislation as the crucial pre-requisite on further success of IDA prevention. The Association of Fortified Food Producers designed the draft law on the mandatory wheat flour fortification in December 2005 and submitted it to the Ministry of Health. After the regional workshop in Almaty in February 2006 the Project Team designed a draft law "On Fortification of Bakery Wheat Flour", a draft intergovernmental agreement "On the Iron Deficiency Anemia Prevention in the Commonwealth of the Independent States" and revised a draft Governmental Decree "On Fortification of Bakery Wheat Flour". These drafts were conveyed to the Ministry of Health for further discussions and considerations.

58. In *Uzbekistan* the revised draft USI Law was discussed by all Ministries and Government Agencies. The group of parliamentarians also designed another draft and proposed the Cabinet of Ministers to consider both options. The Cabinet of Ministers decided to combine two drafts and conduct a workshop to consider the final revisions. The Ministry of Health proposed to hire the domestic legal expert in order to finalize the remarks on the proposed workshop.

#### b) Quality Control on Fortified Food

59. In accordance with the standards and regulations there is the system of the quality control on the fortified food by the food industries, government control agencies and provisions for consumers' control. The JFPR Project provided one-wave spectrophotometers (WYD Iodine checkers) and mini-titration laboratories for salt enterprises; spectrophotometers for SES Central Laboratories and reference laboratories associated with Food Producers Associations; and also ensured the possibilities for tests of the iron and micronutrients content in flour samples at high-level equipped laboratories of KAN. UNICEF provided salt test kits for social mobilization campaigns and consumers' control at markets and household level.

60. The *Kazakhstan* Country Team convinced the Ministry of Industry and Trade on acceptance of the tests on iron content for issuing the certificates on the quality of the fortified wheat flour. KAN informed about the installation of the spectrophotometer and start of the testing of iron content and some of micronutrients. It was agreed that SES Central Laboratory will provide tests of the wheat flour samples on the regular basis.

61. The external quality control at salt enterprises demonstrated that 97% of samples at Araltuz and 53% at Pavlodarsalt were adequate; the independent tests revealed the average iodine content of 32.7 ppm for Araltuz production and 29.1 ppm – for Pavlodarsalt production. The HPLC tests of the fortified wheat flour samples, provided by KAN and American Ingredients Company have demonstrated the compliance of the micronutrient content to the required levels.

62. In *Kyrgyz Republic* the JFPR Project provided one-wave spectrophotometers (WYD Iodine checkers) and mini-titration laboratories for salt enterprises; spectrophotometers for SES Central Laboratory and KAN Reference Laboratory; and also ensured the possibilities for tests of the iron and micronutrients content in flour samples at high-level equipped laboratories of KAN and American Ingredients Company. The Project provided salt test kits for social mobilization campaigns and consumers' control at markets and household level which was conducted in cooperation with the Associations of Food producers and Swiss Red Cross.

63. The Association of the Producers of Fortified Wheat Flour and Bakery facilitated the spot tests at the industrial sites (235 tests were made in 2005) and provided the spectrophotometer test on the 20 samples of the fortified wheat flour. The content of the tested micronutrients was adequate. However the spectrophotometers which were provided by JFPR Project were not utilized at all. One spectrophotometer was under installation at the Central SES during the mission period, and the other was on storage with the Association.

64. The Salt Association tested the samples of the 13 most popular salt brands at the markets and only 3 brands' samples were adequately iodized. In other 10 brands' samples the content of iodine was between 8.8 and 20.1 ppm, and one brand sample contained 88.5 ppm of the iodine. Central SES made the regular test at the whole sale market and the tests of 6,422 samples in 2005 found that 25.5% of the samples had inadequate content of the iodine (in 2004 – 25% from 7,953 samples). In 550 cases the non-adequate salt was taken from the market and the salt producers were urged to re-process the iodization of the 22,176 kilograms of salt (628 cases and 73,838 kilograms in 2004). The penalties were imposed on the 134 traders (in 2004 – 214 penalties). The Association of Salt Producers reported that the deviation of the iodine content occurred because the high humidity level of salt due to the lack of proper salt processing equipment (drying apparatus) and poor packaging.

65. In *Mongolia* the requirements and methods of the quality control were adopted in a number of standards and regulations. Still this legal basis needs to be introduced at the food industries as most of it did not have facilities and capabilities to ensure the adequate control system. At the salt industries the use of test indicators remains the main method to check the iodine content while little number of the salt industries uses the WYD-checkers.

66. The quality control on the fortified flour is still the challenge for the flour milling industries. Only medium size flour mills have the internal laboratories and established the spot-test control. Most of participating industries use the premix utilization data to calculate the micronutrients' content in fortified wheat flour. CPO made a contract with National Biotechnological University on HPLC tests of flour samples. However the equipment allowed testing of thiamin and riboflavin only, also the Standard Agency doubted the quality of measurement.

67. The Consumers' Federation proposed some activities in order to establish the continuous control at the wholesale and retail markets in cooperation with Food Producers' Association and Special Control Agency. The assistance of the 2,300 staff workers and volunteers of the Consumers' Federation could be also helpful in monitoring of the quality assurance at the production sites.

68. In *Tajikistan* the requirements and methods of the quality control were adopted in related standards and regulations. Still this legal basis needs to be introduced at the food industries as most of it did not have facilities and capabilities to ensure the adequate control system. While all three main salt industries use the WYD-checkers, most of medium-size flour mills do not have any facilities to conduct the spot tests. The Tajikistan Standard Agency and the Antimonopoly Agency proposed to coordinate the activities with the Ministry of Health in order to establish the continuous control at the wholesale and retail markets.

69. CPO investigated the possibility of the contracting Chemical University on HPLC tests of flour samples. However the equipment was not functioning. The two spectrophotometers, which were provided in 2003, were not installed. The SES Central Laboratory informed that the second spectrophotometer was broken due to the step voltage. Both spectrophotometers need calibration and certification by the Tajikistan Standard Agency

70. The overview of the internal/external monitoring on the fortified food production in participating countries is presented in Tables 7-9 below.

**Table 7. Data on Quality Control of Iodized Salt at Industrial Sites in 2004-2006**

Country	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan
I. Internal Quality control					
I.a Amount of tests					
2004	1,980	500	3,997	4,891	13,595
2005	2,082	1,600	1,128	6,085	9,208
January-March 2006	545	400	2,191	2,021	1,907

I.b Adequate samples (%)						
2004	100.0	100.0	85.0-100.0	90.1-100.0	100.0	
2005	92.6-100.0	100.0	98.0-100	95.1-100	100.0	
January-March 2006	100.0	100.0	75.6-	98.2-100.0	100.0	

II. External Quality control

II.a Amount of tests

2004	194	56	211	1,793	502
2005	101	30	166	2,622	892
January-March 2006	20	15	921	1,740	251

II.b Adequate samples (%)

2004	100.0	83.3-100.0	75.0-100.0	89.5-100.0	100.0
2005	100.0	100.0	100.0	91.7-100.0	85.0-100.0
January-March 2006	100.0	100.0	100.0	79.1-99.1	87.0-100.0

Source: Country Project Progress Reports, 2004-2006

**Table 8. Data on Quality Control of Iodized Salt at Local Markets in 2004-2006**

Country	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan
<b>I. Governmental Quality control*</b>					
I.a Amount of tests					
2004	15,980	2,652	749	14,274	12,556
2005	9,839	6,761	1,079	81,820	12,077
January-March 2006	1,854	685	176	39,510	—
I.b Adequate samples (%)					
2004	78.1-99.4	71.3-80.3	75.0-100.0	64.2-91.4	31.4-81.9
2005	96.3-97.5	71.0-88.5	93.9-100.0	71.2-86.2	68.1-71.0
January-March 2006	98.0	75.1	97.1	82.2	—
<b>II. Non-Governmental Quality control**</b>					
II.a Amount of tests					
2004	87,630	1,369	876	29,752	—
2005	—	—	1,789	58,590	—
January-March 2006	—	562	425	27,995	—
II.b Adequate samples (%)					
2004	66.2-99.5	55.2-76.1	75.0-100.0	72.5-95.2	—
2005	—	—	76.2-100.0	68.1-87.5	—
January-March 2006	—	93.6	98.8	69.1	—

\* Authorized Governmental Control Agencies (Sanitary Epidemiology Services and Other)

\*\* Non-Governmental Organizations (Consumers' Federations, Food Producers and Women's Associations)

Source: Country Project Progress Reports, 2004-2006

**Table 9. Consolidated Data on Quality Control of Fortified Wheat Flour in 2004-2006**

Country	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan
<b>I. Spot-tests at the Industrial Sites</b>					
2004	8,850	2,187	425	10,445	3,025
2005	10,473	262	1,341	10,524	—
January-March 2006	1,363	69	575	2,631	—

## II. Spot-tests at SES and Food Associations Laboratories

2004	—	76	15	—	—
2005	—	—	30	—	—
January-March 2006	—	—	6	—	—

## III. HPLC Tests at the Independent Reference Laboratories

2004	30	34	11	32	36
2005	1	25	—	—	—
January-March 2006	3	14	6	—	—

Source: Country Project Progress Reports, 2004-2006

### c) Affordability of the Fortified Food

71. In all participating countries the Project Teams continued price monitoring on the fortified food at production sites, wholesale and retail markets in order to ensure its affordability to poor families. The Project did not face the evidence that the production of the quality fortified food would increase the prices dramatically, so that the target beneficiaries would not be able to use the advantages of the fortification program. The consolidated data on the fortified food products in 2004-2006 can be found in table 10 below.

**Table 10. Affordability of the Fortified Food Products in 2004-2006 (wholesale and retail prices on the selected fortified food products)**

Country	Kazakhstan	Kyrgyz Republic	Mongolia	Tajikistan	Uzbekistan
<b>I. Prices on the Iodized Salt (per kilogram)</b>					
I.a Wholesale prices					
2004	0.19	0.10-0.12	0.15-0.25	0.02-0.03	0.10
2005	0.12	0.07-0.12	0.20-0.35	0.10-0.25	0.12
January-March 2006	0.12	0.07-0.01	0.12-0.19	—	0.10
I.b Average prices					
2004	0.19	0.12	0.20-0.35	0.03-0.05	0.07-0.14
2005	0.13	0.10-0.15	0.20-0.35	0.10-0.25	0.08-0.15
January-March 2006	—	0.12-0.15	0.12-0.17	0.10-0.25	0.08-0.15
<b>II. Prices on the fortified wheat flour</b>					
II.a Wholesale prices					
2004	87,630	1,369	876	29,752	—
2005	—	—	1,789	58,590	—
January-March 2006	—	562	425	27,995	—
II.b Average prices					
2004	66.2-99.5	55.2-76.1	75.0-100.0	72.5-95.2	—
2005	—	—	76.2-100.0	68.1-87.5	—
January-March 2006	—	93.6	98.8	69.1	—

Source: Country Project Progress Reports, 2004-2006

### B.4 Social mobilization and poverty targeting

72. In *Kazakhstan*, CPO in cooperation with KAN Country Communication Team and the Confederation of NGOs of Kazakhstan (CNOK) has selected local partners at 7 provinces (of 14 in Kazakhstan) and consolidated efforts at Kyzylorda and Akmolinsk Provinces. The

Country Team has designed the various communication and education materials to be used in advocacy campaigns by NGOs. The production and distribution of the materials to the partnering NGOs is planned for the end of April 2006.

73. The Project Team discussed with UNICEF the possibilities for linking the social mobilization campaign to the information workshop with flour millers in order to coordinate the advocacy for fortified food to its production and trade. It was proposed to look for the ways of fortified food advocacy at the high politician level. UNICEF had a good experience in conducting of the meeting for parliamentarians and high government officials to support the IDD elimination in September 2005.

74. The Project team also agreed with the National Commission on Family Affairs and Gender Policy under the President of the Republic of Kazakhstan to review the Project implementation and its impact on health and nutrition status of poor mothers and children at its nearest meeting in June 2006.

75. *Kyrgyzstan* Project Team conducted several meetings with project partners from UNICEF, Swiss Red Cross, and ADB Project on Early Childhood Development; Family Group Practitioner and Health Promotional Center and key NGOs on the communication strategy in order to determine the areas for cooperation within 2006-2007. 18 local areas were identified for implementation of social mobilization and communication activities, and three working meetings with partners as UNICEF, Swiss Red Cross, Ministry of Education, National Health Promotion Center, Association for Family and leading NGOs, Aga Khan Foundation. The Project established links with the other ADB projects: Early Childhood Development and Health Reform II, which are implemented in the Kyrgyz Republic. In January-February 2006 the Country Team conducted the national and regional workshops for mass media and local NGOs on fortified food advocacy.

76. The participating food industry has contributed to the advertising of the 'Healthy Food' logo. For example, some of big-scale flour mills established billboards; and one salt company has the agreement with municipal transport service on advertising posters in the local buses.

77. The CPO established the data bank on the information materials, including publications in mass media, audio and video-production on the nutrition and food fortification issues. The data bank is available for partners and for the Project stakeholders.

78. In *Mongolia*, the Project Team discussed the modalities of strengthening the social mobilization. The information and education campaign in 2003-2005 resulted in visible increase of knowledge on the use of fortified food products and increased demand, especially for the iodized salt. However, these activities should be reviewed by the local teams in order to support the choice consciousness by the consumers. The Project Team considered the efforts of the JFPR 9005 Project local teams in rural areas and aimed further activities to ensure the use of fortified food by the health and educational institutions, which get public funds. The establishment of the National Fortification Alliance and Committee on 'Healthy Food' Logo could be helpful in fortified food advocacy.

79. The Project Team discussed the issues of wide information and training campaign with the Mongolian Women's Federation, which has the wide network of organizations and volunteers. The Consumers' Federation, which has the high credit among population and food producers, proposed to continue the good practice of the annual trade fairs where the quality fortified food products could be exposed to the general public. The Consumers' Federation proposed to design the criteria on annual award on the best fortified food product on behalf of consumers.

80. The need to bring the issue of the incentives for food producers at the high politician level was discussed with UNICEF. It might be helpful to conduct the information meeting for parliamentarians and high government officials to support the expanded wheat flour fortification.

81. In *Tajikistan*, the Project Team discussed the modalities of strengthening the social mobilization. The problem seems to be in establishing of the adequate control on fortified food distribution and sale. The Project Team expressed its concern in limited access to the mass media as the national TV and Broadcasting companies were charging the broadcasting time.

82. The President of Tajikistan expressed the high-level support to universal salt iodization in his addresses to the Government and Women's Federation. The idea of the civil society forum on the issues of inadequate salt iodization and distribution was supported, and the Office of the President would provide assistance to invite high-level politicians to such a forum. The Project Team and NGOs Council will design the proposals on such a forum and discuss it with the Government and ADB and UNICEF. The Office of the President also agreed to facilitate free broadcasting of the video clips on the fortified food and convince the local authorities to share the costs on billboard installation.

83. The framework of the NGOs activities in Rasht region and Khatlon Province were discussed between the Project Team and NGOs Council. The Project Team proposed to promote food fortification advocacy by the means of two popular magazines: Shifo (health promotion magazine for general public) and The Public Health of Tajikistan (specialized magazine for medical community).

84. In *Uzbekistan*, the Project Team discussed the ways to involve NGOs in order to facilitate revision and adoption of the Salt Iodization Law. The NGO Kamalot was selected by the Project Team to conduct special information and advocacy activities on the proposed draft law.

### C. Financial Performance

85. The total cost of the Project was estimated at \$2 million equivalent financed on a grant basis from JFPR, funded by the Government of Japan. The JFPR funds are spent on the framework of CIPs (Appendix I). The consolidated Statement of Expenditures from the beginning of the Project up to 31 March 2006 (Appendixes II and III) shows the ongoing progress in funds utilization. The overall funds utilization by the end of the reporting period is estimated at 11.55% of the total grant amount. The utilization of JFPR funds by 31 March 2006 was \$230,912 (see Table 11).

**Table 11. Utilization of JFPR Funds in January-March 2006**

Project Expenditures Category	Cost Estimates	Beginning to date (US\$)	This period		Accumulated expenditures	
			US\$	%	US\$	%
Equipment and Supplies	414,000	17,268.55	811.56	0.20%	18,080.11	4.37%
Training, Workshops, Seminars	424,000	17,577.93	28,315.66	6.68%	45,893.58	10.82%
Advocacy and Communication Activity	125,000	6,000.00	7,438.32	5.95%	13,438.32	10.75%
Consulting Services	52,500	1,052.57	2,604.76	4.96%	3,657.33	6.97%
Social Mobilization by NGOs	250,000	30,719.19	8,576.13	3.43%	39,295.32	15.72%
Project Management	225,000	71,623.63	23,072.03	10.25%	94,695.66	42.09%

Project Expenditures Category	Cost Estimates	Beginning to date (US\$)	This period		Accumulated expenditures	
			US\$	%	US\$	%
Operational Studies and Impact Assessment	50,000	4,796.03	10,855.00	21.71%	15,651.03	31.30%
Other Project Inputs	377,200	200.67	0.00	0.00%	200.67	0.05%
Contingency	82,300	0.00	0.00	0.00%	0.00	0.00%
<b>Total</b>	<b>2,000,000</b>	<b>149,239</b>	<b>81,673.45</b>	<b>4.08%</b>	<b>230,912</b>	<b>11.55%</b>

Source: Country Project SOE Forms, 2005-2006

86. The utilization of JFPR funds was low in Mongolia (10.7%), Kyrgyz Republic (12.4%) and Tajikistan (15.4%); it was also noted that most of CPOs limited the project implementation to trainings and workshop and routine project management activities. The details of JFPR funds utilization at country level by 31 March 2006 can be found in Table 12.

**Table 12. Utilization of JFPR Funds by the Project Components in 2005-2006 (May 2005 – March 2006)**

Country	Component 1 Strengthening the capacity of salt industries and flour mills	Component 2 Strengthening of the Government capacity	Component 3 Social mobilization and poverty Targeting	Component 4 Project management, monitoring and evaluation	Other Project Inputs	Total
<b>Kazakhstan</b>						
Cost Estimates	32,820	12,900	135,100	76,580	42,600	300,000
Utilized amount, US\$	22,552	1,361	33,852	31,170	13,406	102,340
Percentage %	68.7%	10.5%	25.1%	40.7%	31.5%	34.1%
<b>Kyrgyz Republic</b>						
Cost Estimates	27,125	36,300	138,200	55,100	43,275	300,000
Utilized amount, US\$	8,271	1,129	9,821	17,840	-	37,060
Percentage %	30.5%	3.1%	7.1%	32.4%	0.0%	12.4%
<b>Mongolia</b>						
Cost Estimates	45,500	49,500	80,200	72,000	52,800	300,000
Utilized amount, US\$	17,137		1,870	11,299	1,735	32,041
Percentage %	37.7%	0.0%	2.3%	15.7%	3.3%	10.7%
<b>Tajikistan</b>						
Cost Estimates	40,000	34,400	131,000	58,500	36,100	300,000
Utilized amount, US\$	4,912	0	19,058	21,523	711	46,204
Percentage %	12.3%	0.0%	14.5%	36.8%	2.0%	15.4%
<b>Uzbekistan*</b>						
Cost Estimates	49,700	27,900	110,000	60,200	52,200	300,000
Utilized amount, US\$	830	1,322	0	11,114	0	13,267
Percentage %	1.7%	4.7%	0.0%	18.5%	0.0%	4.4%

Source: Country Project Progress Reports, 2005-2006

Note: Uzbekistan CPO utilized the reimbursement funds

87. Contrary to the JFPR 9005 Project, the implementation of JFPR 9052 was based on regular co-sharing by the Project stakeholders in the participating countries. The agreements between the ADB and the participating Governments estimated the amount of contribution in \$2,881,000; and in the reporting period the CPOs reported on the actual contribution of \$2,264,845 (including contribution-in-kind).

88. In *Kazakhstan*, the Government reported on the significant contribution of laboratory equipment, reagents and supplies for the governmental control agencies for the sum of \$1,852,308. The salt companies purchased packaging equipment and supplies, and potassium iodate for the sum of \$28,534. The flour mills contributed to the workshops, trainings and laboratory supplies for the amount of \$16,188.

89. In *Kyrgyz Republic*, the amount of contribution was \$36,841 and most of it was donated by the Swiss Red Cross in the form of sprinkles (\$27,636). UNICEF also allocated \$5,535 for media materials. The share of the Government and flour millers for Project advocacy was \$3,670.

90. The *Mongolian* contribution in reporting period was \$60,329, most of this amount was spent by flour millers for advertising the 'Healthy Food' logo and fortified wheat flour and for purchase of the laboratory equipment and reagents. The salt companies reported on the contribution of \$9,891 for 'Healthy Food' logo advertising and trainings.

91. The *Tajikistan* informed on contribution of \$210,447 by flour millers for production of bags with the 'Healthy Food' logo for fortified wheat flour. The salt companies reported on the contribution of \$19,632 for 'Healthy Food' logo advertising and procurement of potassium iodate.

92. The *Uzbekistan* salt producers contributed by \$28,914 for procurement of potassium iodate.

#### **D. Management and Operations**

93. The implementation arrangements of the JFPR Project are the following: ADB coordinates overall implementation in all five countries through the RCAO set up in Almaty, Kazakhstan. RCAO is also responsible for centralized procurement of equipment and fortificants. Participating countries set up Country Steering Committees for project oversight, the latter comprising representatives from the finance, economic development, and health ministries; the private food industry; and the NGO community. The MOH of each participating country was functioning as the EA of the JFPR project and established the CPO. The EA in each participating country is responsible for overall coordination of Project activities in its country, including the following: (i) coordination with other ministries, agencies and NGOs; (ii) approval of annual work plans and disbursement plans; and (iii) ensuring compliance with ADB rules for procurement and disbursement. A Country Project Coordinator (medical doctor), a Financial Specialist and Administrative Assistant (optional) staffed the CPO in each participating country. The CPO staff has formal contract arrangements with EA based on terms of reference approved by ADB. The RCAO staff is recruited by ADB and financed under the Project. The RCAO acts as the central project implementation unit and coordinates Project planning, reporting, monitoring of implementation progress, international procurement, and organizing workshops and round table meetings. RCAO responsibilities also include: (i) detailed project planning and management; (ii) assistance to EAs on local procurement and contract administration; (iii) review of withdrawal applications for CPOs imprest accounts; (iv) monitoring of disbursement of funds, including timely submission of

withdrawal applications to ADB; (v) preparation of consolidated quarterly progress and completion reports; (vi) coordinating of annual audits; (vii) design and support of the project website; and (viii) assistance to ADB/JFPR staff and consultants' missions. KAN acts as a technical advisor to the RCAO and facilitates exchanges with nutrition institutes in the other Project countries.

94. The meetings of the Steering Committees were regularly conducted in Mongolia and Tajikistan only. In Kazakhstan, Kyrgyz Republic and Uzbekistan the revised membership of the Steering Committees was under adoption by the Government.

95. In the reporting period most of the Country Project Offices (except Uzbekistan) conducted the bids on the auditing services. The bids were prepared and conducted in accordance with ADB procedures and under RCAO guidance. The invitations were sent to the recognized international auditors and local auditing companies, which were pre-qualified by the ADB and the World Bank.

96. The bids were not responded in Kyrgyz Republic, and in Kazakhstan only one international auditing company responded with bid proposal. After consultations with ADB the Country Project Teams decided to re-advertise bids and invite local companies, which were certified by the Ministry of Finance. In Mongolia and Tajikistan the Country Project Teams received the bid proposals from the local auditing companies, which are under consideration of the Bid Evaluation Committees.

97. The Kazakhstan Country Project Team conducted the Annual Evaluation Meeting in started preparation for the annual evaluation workshops to be held in each country within March-April 2005. The workshop reviewed the progress in project implementation and discussed the pending issues of wheat flour fortification production and regulation; premix utilization and further procurement; quality assurance and control on fortified food; use of 'Healthy Food' logo; operational studies and Project impact assessment. The Evaluation Workshop was successful and helped the Project stakeholders to review the compliance of the activities against desired objectives and to revise the schedule and priorities of the next steps. The Country Team shared the concern of limited wheat flour fortification and considered the follow-up actions in order to sustain the existing mandatory regulations within the ongoing legislative reforms. The suggested information workshops for the local authorities in two pilot provinces with the UNICEF/GAIN support can facilitate the demand of the fortified wheat flour and also introduce some incentives for flour millers. The Steering Committee on its next meeting will consider the issue of public hearings on the mandatory wheat flour fortification and coordinate the necessary assistance from the JFPR Project and UNICEF. The National Commission for Family Issues and Gender Policy will include the reports on the Project implementation from the relevant ministries and the governors from two pilot provinces. UNICEF Representative kindly agreed to follow-up the issue of the fortification legislation with EU experts in the framework of the EU/WTO regulations.

98. Project Teams in Kyrgyz Republic, Mongolia and Tajikistan conducted preparations for the annual evaluation workshops.

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