MINUTES
of the Second Technical Meeting of the Regional Expert Group on Harmonization of Wheat Flour Fortification Standards in Central Asian Republics, Afghanistan and Pakistan
6 September, 2016, Hotel Rixos, Almaty, Kazakhstan

Participants:
42 participants from Central Asian Republics, Afghanistan, Pakistan, and International Organizations

Welcome speech, Sharmanov T.Sh., Kaz:
It’s my privilege to start this meeting. First, I would like to commemorate President of Uzbekistan, Karimov.

We have here reps of all experts from all countries in food fortification. USAID priorities: establish a regional group of experts under the leadership of KAN. Group represents associations, producers of wheat flour and experts from all countries. Specialists of KAN developed specifications for high and low extraction flour, according to WHO recommendations. The first meeting in March 14-15, there was reached a consensus on premix composition. Four ingredients for high extraction flour. KAN developed for low extraction flour – vitamin content. All recommendation have been shared with all countries, it is suggested that all countries will present their standards at the meeting. Goal: to ensure qualitative fortification with uniform premix for all countries. Reach a consensus on terms of adoption of national standards and develop external and internal control methods and establish intersectoral commissions, and facilitate exports/imports by harmonization of standards.

Participants asked to represent themselves and their countries.

Let’s start our meeting. I welcome all of you, I am very pleased to see high level experts from respective countries. We are experiencing longevity and improvement of quality of live. And we are in charge of the central point in development of our health of population through better nutrition and it is impossible to overestimate your role in this regard.

Let’s move to program.

Lane, USAID/CAR: Welcome to all countries. USAID’s important initiative.glad to see multistake group. GAIN and driving force KAN. We will continue to support.

Oksamitniy, UNICEF Kaz: thank you. We are friends over 20 years. KAN became an important resource center, including in health of children. Hope this meeting will move ahead the harmonization. 2030 sustainable development (UN) – all countries working on location and adaptation of sustainability goals. And fortification is crucial in this regard. I visit often CAR countries and mother’s health is crucial, and anemia and nutrition are very important. UNICEF will continue to collaborate with KAN, GAIN, and USAID. Amir Hussein will help UNICEF. Thank you

Dora Panagides, GAIN: pleasure to welcome. Dedication and hard work of KAN would be impossible. Very important documents. Inputs of Quentin, GAIN. Acknowledge USAID and US people. Your participation demonstrates dedication of all countries. Uniform premix for all countries. Harmonization documents on website. Two formulations are agreed upon – for two types of flour. Iron content. Back in your countries you should discuss and agree in your countries. We proposed harmonized standard, 50% countries hopefully will accept these standards.
Sharmanov, KAN, Kaz: Kazakhstan is behind in fortification, despite Presidential Decree. Under the lead of MOHSD, while Ministry of Agriculture is an interested party. So asked Dr.Bayserkin. He headed SES, and it was transferred to MNE. I ask him to transfer this info to the Minister.

Bayserkin, MOHSD, Kaz: I thank Sharmanov for invitation of MOHSD. It is pity that MOHSD is behind, by pushing of ShT this issue was raised. I thank USAID, they help for many years to Kazakhstan in fortification, listed all involved, KAN. Since January Pres endorsed “Densaulyk” program which includes issues of public health. He stressed the importance of intersectoral collaboration to promote health. One of examples is food fortification which affects health of population, and interests of neighboring countries. We have data on positive effect of fortification. Pres said to decrease maternal and infant mortality to levels of OECD. These goals are not achievable without the fortification programs. I wish good discussions and reach consensus and thank ny teacher ShT.

Sharmanov, KAN, Kaz: Next time MOHSD will report.


Gan Yevgeny, Kaz: we are getting more attractive, thank you. Fortification program is multifaceted. Important for women and children. And we thankful to USAID and GAIN is establishing a regional team, better understanding and trade. I wish to meet beyond this program as well. We have a lot of friends due to this program. And wish to contribute to furtherance of the program.

Mamyrbayeva, Kyrg: Thank you. We also have intersectoral teams and programs and flour fortification is one projects uniting all sectors. Thank you. Presentation – look the slides. Premix is procured through MOH and covers all, but the actual fortification is low. Reference data on benefit of fortification. Composition was approved in several stages, including the parliament. Premix is being paid by the WB grant. Premix will be purchased by producers, then the cost of flour may increase. Kazakh flour is cheaper than local. Therefore producers are not willing to fortify. No GOST regarding low/high extraction flour. Regarding WHO attitude to B12 fortification (no evidence). Reference data on B12 – slide. We have access to animal products in Kyrgyzstan. Work group recommended to delay B12 fortification, so premix formula will not be changed. Zinc in premix does not affect Zn status, it shall be fortified separately. So, may be we should exclude Zn , while Fe and folic acid are very effective. So, inclusion of additional elements may endanger fortification programs.

Sharmanov, KAN, Kaz: Kyrg is ahead of Kaz in fortification, due to more democracy which is very important for the people of Kyrg.

Vokhidov, Taj: Thank KAN on development of normative base. Our work group made a good job, in development of laws. Parliament established an initiative work group for drafting Law on fortification. Experience of Taj with WB showed importance of appropriate laws. Listed reps of the work group (MPs). Law drafted and discussed by different groups in June conclusions on a two-month for drafting the Law. Hopefully soon the Law will be adopted.

As for GOST, there is a separate presentation. Laws are very important otherwise producers will not follow just recommendations. Food safety coordination council, to be used as a platform of national alliance for food fortification.
**Atakhanov, Uzb:** Thank you for condolences, and organizers of the meeting. Presentation on current situation, GAIN’s prant since 2004 to implement National program of flour fortification. Accumulation funds from mills to promote fortification, since 2005. Next Law on prevention of micronutrient deficiency in 2010, since 2010 salt and flour must be fortified. In 2013 certain benefits for importation of fortified products, and then tax benefits for producers of fortified product.

50% local producers and 26% importation from Kazakhstan. High grade changed from 3% to 12%, so it is possible to consider fortification of this type in Uzb. Since 2005, flour fortification has increased from 75,000 to 1,516,000 tons in 2015.

**Nazarov, Turkmenistan:**
No GAIN in the country yet. Presentation. Law on certification 2013; Food safety and quality 2014; Public health care Law 2015; State program Saglyk (Health). Pres decree on Salt iodination and flour fortification with iron 1996; 2006 – Folic acid fortification; National program of health nutrition 2013; Technical conditions for iron and folate fortification; External control instructions; Mandatory fortification of higher and first grade flour; premix content, from Germany (sulfate); Since 2008 with UNICEF memorandum on purchase of premixes (funded by state); awarded for fortification.

All four is fortified (20 high grade, 70% first grade).

Role of KAN (Tazhibayev, Sharmanov) in establishing the fortification programs in Turkmenistan.

**Khawaja Ahmed, Pakistan:**
Since 2001, Nutrition dept under MOH; 2003 – National plan to combat micronutrient deficiency;

List of initiatives – see the slide; NFA goals and objectives; NFA compositions and achievements – see the slides;

**BREAK**

**Tazhibayev, KAN, Kaz:** two months ago we sent out presentation instructions. However, nobody followed that’s why we are late. I liked Uzb that 100% local production are fortified, that is, about 35-40%. Turkmenistan said about 90% are fortified. As for Kyrg, no available data, Kaz, 34% households consume fortified flour, comparable with Uzb.

**Kyrg:** Over 60% imported, as for local only 12% fortified. Because premix is expensive.

**Quentin, GAIN:** Pleasure to be back and meet old and new friends. Session on low extraction flour. Discussions after all presentations.

**Ludin, Afg:** In June 2016 Ministry of PH proposed to assign technical fortification committee to finalize the adaptation of harmonized flour fortification. At second stage 6 members reviewed national standard and compared with KAN proposal. Members agreed upon 7 micronutrients proposed by KAN. B12 changed fro 0.008 to 0.004 ppm for low extract flour. Zinc reduced from 50 to 30; Rationale for differences – see the slide. Standard will be implemented soon.

**Sinyavsky, KAN, Kaz:** two standards have been developed, with participation KAN, MOHSD, MNE, Standardization committee. Quality requirements to grain for milling (LEF) – see the slide; permissible levels of vitamins and levels – see the slide; toxins and pesticides MPC; instructions on organoleptic control; lab control by approved methods; labelling and packing; transportation and storage; nutritive value and then qualitative methods of iron determination;
Aytmurzaeva, Kyrg: legislative base – two laws; decree of government; state program of food security and nutrition. Standards – international 26; 4 Russian Fed standards and 3 national standards of Kyrg; including for flour, premixes; two technical committees involved in development of standards; standards for bakery flour and general purpose flour. Composition and levels of use of premixes are not in standards, to be established by MOH; classification of flour is different, higher, first grade; safety requirements to fortified flour; three forms of assessment of compliance of flour quality; production control, declaration of compliance and state surveillance. Problems: premix production control; no test systems for premix quality control; reconsideration of three standards for introduction of water-soluble iron; no funding for reviewing the standards;

Pakistan: challenges and constraints: four problems; national and inter/provincial differences in standards; food depts. In provinces develop their own regulations; since March stakeholders started discussions to harmonize on national and regional levels; NFA and others established core groups and scientific committee; after agreement of all stakeholders in 2016 – in next quarter to finalize with KAN and WHO recommendations; by second quarter 2017 consensus will be reached with provinces and other.

Vokhidov, Taj: we made the similar work; work groups, academics; draft of first grade flour; developed by state enterprise Galla (grain); with participation of other stakeholders; approved by MOHSD and transferred to the Agency of standardization; table of differences between national and KAN versions of premixes because of differences in nutrition pattern (more animal foods in KAZ/KYR); table of daily intake of micronutrients based on KAN recommendations; draft will be adopted by Tajik standard agency by mid-September.

Gafurova, Uzb: Thank the developers of LEF standard. It is convenient with work a template. We have some differences; list of laws on micronutrients and fortification; national standard for bakery flour mandatory; regional draft also includes all these aspects; few differences just due to some technical requirements, requirements to content of metal magnetic admixes – asked for comments; requirements to safety – in line with national standards; the rest are identical; next table on national standard – because of differences between Customs Union and national requirements; agree with micronutrient composition beside ongoing discussion on B12 and increased Zn; comments welcome on levels of vitamins; in conclusion – national draft has the same sections as proposed – see the slide. Procedures – see the slide.

Turkmenistan: Standards are identical; they will be reviewed and assessed in terms of further potential implementation

Discussion:

Afghanistan: few points – we are different – issue of fortification, safety and quality – three things should be reflected; Fe and Zn mandatory, vitamins optional; we are not exporting, we are not changing our national standard; including cost issue – producers cannot afford; Uzb exports to Afg;

Quentin, GAIN: dealing with exportation, such matters to be discussed directly with Gan and Uzb rather than at the forum;

Gan, Kaz: to the beginning – we discussed what we want to get in the end. I always I said no regional standard is achievable. They are recommendations for harmonization of national standards regardless whatever we may sign here. Because no universal standard can be achieved. But we can make maximally close to each other;
Dora, GAIN: safety and quality – they should be different level from fortification. Through other mechanisms. Proposed standard has a range, there is not just one figure that makes possible to harmonize. In the end of the day the exporter has to comply with regulations of the importer, including labeling, etc.

Tazhibayev, KAN, Kaz: once more – we talk about harmonized standard; we want the national standards to use unified premix composition – then the national standards will be harmonized. All related to labelling, packages may differ but the unified premix addresses the harmonization.

Kyrg raised the issue of B12 and later by Uzb. We analyzed our region, but there are no data available on B12. Based on nutrition pattern in Kazakhstan, because B12 is met only in animal products, and Kyrgyzstan and others the consumption of animal products declines across the region from Kaz to Pak. So proposed to leave B12 for Atta. B12 is used for fortification in a few countries. So, based on Kyrgyz proposal, we shall decide on B12 – either refuse to fortify, or leave 0.004 ppm for Atta. I do not believe that B12 and Zn fortification does not have any effect. Because many recommendations and meta-analyses do not reject Zn and B12 fortification. So we shall agree on level of B12, and leave Zn in fortification premixes.

Turk: Any difference in levels of Zn in foods across the region.

Tazhibayev, KAN, Kaz: Zn availability is very low from plant foods.

Kyrg: I cited a systematic review which shows that Zn is not beneficial in premix composition. It should administered separately. And we cannot afford introduction of B12. KAZ continues exporting the non-fortified flour. B12 – 0.004 we cannot identify vitamin in premixes.

Quentin, GAIN: I ask Kyrg provide information on Zn to Shamil.

UNICEF: exciting debate; important to get evidence; USAID might help in generation of evidence; recommendation on knowledge and evidence generation; think about long-term effects; vitamin D is an example; there is no consent yet on composition of Zn and B12; keep balance between being too scientific and practical.

LUNCH BREAK

A/n session 1:

Tazhibayev, KAN, Kaz: High extraction flour (HEF) never fortified in CAR but this issue is important for Afg and Pak, therefore KAN developed draft standard for HEF fortification.

Afg: table based on WHO; table comparing Afg and KAN standards; National FF committee agreed on 4 micronutrients; B12 0.008 important for Afg; marking and labeling requirements – see the slides;

Syniavsky, KAN, Kaz: definition and requirements to HEF; - organoleptic and physical-chemical characteristics; contamination permissible; quality requirements to HEF - see the slides; fortification requirements – see the slides; toxins and contaminants – for Customs Union countries; assessment of organoleptic properties – GOST methods for content of vitamins, iron and zinc); labeling according to specifications; nutritive and energy value – see the slide; and lab methods and reagents.

Tazhibayev, KAN, Kaz: Afg seems to agree with the proposed.

Pak: Our committees agreed B12 and Zn but it is not ratified yet. Hope this month.

Dilorom, Uzb: metal magnetic admixture – is it possible to use sieve method.

Shefner, Kyr: magnetic check should be before the fortification. Just make references to methods used in CIS.
Quentin, GAIN: choice of iron on WHO recom 2009-2010. EDTA is recommended for HEF.

Kind invitation – very important on methods of ext/int quality control.

Presentation of Amirov - comment of Ludin on importance of QA and QC for regional harmonization

Dilorom, Uzb: thanks KAN and based on recommendations of KAN local guidelines developed. Information on ext/int control and regulatory documents and all the aspects, agencies involved; three agencies entitled to use sanctions; internal control by enterprises using spot tests; list of regulatory documents – see the slide; QC uses qualitative and semi-quantitative methods; we equipped all laboratories via GAIN; HCl availability is a barrier for small labs; training seminars across the country, methods and recording; samples of logs; thresholds of micronutrients for food safety developed in SanPint; external control – two labs equipped – AASP, HPLC chromatograph.

Kyrg: How often ext control and when; total composition of premix or flour

Uzb: at certification; not often; premix as entering control; ext/control till 2012 no regular checks; in 2012 we established laboratory monitoring – so now quarterly checks; if two checks fail then total analysis at the central lab.

Kyrg: quarterly check based on contract or public requirements. What about imported flour.

Uzb: public requirement; imported flour is not fortified; that should be indicated in certificate.

Gan, Kaz: how many labs in Uzdonmahsulot and about precursors;

Dilorom, Uzb: UZDM have license for precursors; small entities do not have; spot test used; standard requires quantitative methods for decision making.

Ludin, Afg: problem with using sophisticated equipment and sustainability; no proper training, HPLC expired in Afg.

Dilorom, Uzb: we can afford and we have suppliers, state control in all regions – total 38 labs across the country, accredited, equipped and have required supplies.

Arykbayeva, Kyrg: in the frame of KAN recommendations; we have internal/mills; based on technical regulations: registration, logs, control of premix dose, tests (qualitative) and mills can contract accredited labs for quantitative; single body to control the fortification; external control – according to laws on entrepreneurship, besides re-checking; all flour must be fortified – higher and first grade; technical audit – acceptable as documentary check; number of checks – once a year, though it can be individualized – depending on risk criteria up to two times; solutions – see the slide. Adding: Shefter – at production control is very important, fortification since 2005; in addition to logs we developed formula for EDTA a new method; but we need a new method, since we have small mills – but the main issue use of HCl as precursor; producers are against; to avoid with UNICEF we developed determination in bread; to make a test-system to be used on market; why we started from bread – because budget organizations must use fortified bread. We use domestic chemicals instead of HCl, we ask USAID and GAIN to help with development of uniform method for flour.

Quentin, GAIN: we can discuss separately the method;

Dora, GAIN: unfortified imported flour in both countries – Uzb accepts, but Kyrg wants to make mandatory; why unfortified flour enters the country?

Kyrg: according to Customs Union, priority to safe
Gan, Kaz: Kazakh law says all flour must be fortified but understanding exports requirements if importer demand fortified. Kaz is ready to export all flour fortified if importers ask.

Kyrg: who concludes contracts; Gan: between businesses.

Damira, UNICEF, Kyrg: it is beneficial to harmonize; Gan: exports fell four-fold to Kyrg in last several years, so the domestic production must be looked at.

Uzb: law on micronutrient deficit does not specify iron; but the decree says all flour produced in Uzb must be fortified; about 30-40% of flour is imported. It is impossible to introduce immediately.

Tazhibayev, KAN, Kaz: if marketed means the imported too.

Uzb: government decided that locally produced shall fall into this category; our technical regulations are close and it is quite acceptable to introduce such restrictions and gradual transition is good.

Kyrg: despite two laws in KAZ non-fortified flour exported

Ludin, Afg: internal control training provided and GAIN provided support to control unit; and training for millers; external monitoring through support of WFP; collect data from mills; no guidelines and capacity for quality control; working through GAIN support on checklist to start external control; just one main lab at MOH; a few small labs for iron testing – spot test; minfin collects samples from suppliers and send to MOH; after regulations approved we will introduce both int/ext control;

Pak: with support of GAIN at mills; we have to raise capacity of our external monitoring agencies; capacity building of lab; training for 40 mills; and link them with central lab;

Taj: no fortification in Taj; in Nov a law will be adopted; currently a standard of 2004, and all documents at TajStandardr; GAIN helping in establishing ext/int control; Taj learning the experience of other countries; currently a consultant is helping with quality control for salt iodination and fortification;

Gan, Kaz: my impression – int control is insufficient; semi-quant would suffice; only 10% have access to HCl and can use spot methods; others use weight method; we were told the method will be available for electrolyte iron; and I support Shefner’s proposal; in external control not much problem;

Dora, GAIN: QA/QC is very important; we are interested to work with you; some have systems established, some just starting; some packaging are misleading; not fortified or improperly fortified; Kyrg said about not cheating of consumers; example of VW; we need move forward with agenda.

BREAK

Gan, Kaz: sampling of grain and flour – 5 regions; test protocols from Akmola lab – see the slides; all indicators are below the MPCs; the same for flour; recommendations - first virgin land harvest was destroyed due to lack of cleaning and drying facilities; grain humidity now is 8-10%; producers were allowed to increase level of weeds; now it has been decreased; agricultural technology; do not store wet grain over 5 days; forage grain has high microbial contaminated; IV class grain will lead the sales this year.

Uzb: do you use pesticides?

Gan, Kaz: current technologies require less chemicals; background pollution is les now;

Diloram, Uzb: IV class grain – should be not less than 25%.
Gan, Kaz: something is happening with grain; several years ago 23% was enough; now we use 25%; and we not use nitrogen fertilizers; this year we have higher protein but less gluten; at our mills yield is 73%.

Quentin, GAIN: similar information available on Canada and US on web.

Dora, GAIN: lot of work done on harmonization; next steps; issues on content of micronutrients; it is not end of journey; quick overview:

Quentin, GAIN: best practices in food standards; see the slides; experience for the last 20 years and examples of good successes; elements needed for development of food standards – see the slide; objectives of national food laws and standards; based on risk assessment by codex; or on independent, objective and scientific risk assessments; involve all stakeholders; info about codex (FAO/WHO); B12, Zn and others; consensus statements are being reviewed and to be published soon; regulatory based on range an minimum; consistency with codex standard structure; WTO challenging ill based standards.

Tazhibayev, KAN, Kaz: rather successful work; teams supported the standards, except Pak (but do not oppose), several proposals from Kyrg about B12 and Zn; Quentin, GAIN and Dora, GAIN said about renewal of WHO recommendations and proposed to link with WHO groups working on B12 and Zn, also we will receive Mrs Mamyrbayeva’s information; this work finishes in September, so our work on harmonization further will require funding; in March we raised this issue, and we asked USAID, GAIN and others and there is some hope for continuation till next July. Assuming the funding, first, drafts on LEF and HEF should be adopted till the end of year probably. Second, laws on mandatory fortification of imported flour. It would benefit the importing countries; third, normative documents – premix for vitamin premixes; we can develop such document and share with other countries (Nov-March); national standard on bread and bakery products – KAN can develop and share with other countries; standards for organization of premixes; then standard for bread and bakery products; again can be shared with other countries; and to hold 3rd technical meeting, as today, in March-May 2017 and discuss achievements and make plans for future. In Turk in end of September a FortiMass training will be held; for monitoring flour fortification; to propose such methodology for other countries to ensure comparability of monitoring results; and concluding report by the end of July.

Dora, GAIN: open floor for discussion; project will be extended through July 2017; third meeting is feasible; you should think what you need for adopting the proposed standards; we are in consensus, except one country; bring one specialist (WHO) on B12 and Zn – it is recommended to include; composition-related Zn doubt, but not rule out now; Quentin, GAIN, Shamil may travel, if you feel benefit;

UNICEF: consider financial aspects.

Dora, GAIN: costing will be brought in the proposals; and its dependence on volumes;

Cost considerations should include returns in future.

Dora, GAIN: take in account nutrients;

Kyrg: once more about premix composition; B12 is not included; Zn is in the composition; EDTA iron welcome from exporters; today there is no evidence on benefit of B12, that’s why we are raising this issue; B12 we cannot afford; because we cannot hide even single publication; folate must be, because 35% women are anemic; so we want to protect our program because only 12% are fortified. Any modification of regulations for businesses is very complicated.

Dora, GAIN: thanks for clarification; please, do not start B12 process;
UNICEF: if harmonization happens what next consequences for countries;

Quentin, GAIN: outcome of NA agreement (Canada, US and Mexico); covered food fortification; various foods; as a result, much freer trade, lower cost of foods; a lot of flour across the countries; premix price dropped; example of French-speaking Union; increase in trade and reduction in cost; another example – WHO Mediterranean region – folic acid etc; it was beneficial for regions.

Kyrg: what the regional project planning about ext/int control; two issues;

Dora, GAIN: QA/QC document for Shamil to comment.

Tazhibayev, KAN, Kaz: quality is very important; because small amount shall be distributed in a huge mass of product; to endure the delivery of declared amount of a fortificant; we discussed the proposed document and interesting experiences of countries; to ensure QA/QC equipment, some shortage of reagents, and proposals for a new test without HCl; another issue is eye-check equipment to be addressed somehow by manufacturers; and again the funding rises; because not only regulatory documents but funding too is important for meeting the demands of population.

Sharmanov, KAN, Kaz: I ask your excuse for not attending all sessions today; I had a long meeting with deputy ministry of education and science; I am a little bit disappointed by low level of fortification (12%) in Kyrg, and doubts about B12 and Zn, though I always underline the leadership of Kyrgyzstan. I understand your problems, and parliamentarism as an example for us. Today we have discussions about dairy products, we are facing the problem that Russia produces fake dairy products. Info on transfats and other nutrients. About palm oil. Thanks to USAID and GAIN we are succeeding in food fortification. Now I am involved in anti-transfat project, with demonstration of new products without sugar.

Dora, GAIN: Prof. Sharmanov you are a real nutrition champion.

Tazhibayev, KAN, Kaz: I am glad we are moving ahead; all countries have a consensus on micronutrient composition despite some issues; progress in quality control; all are enthusiasts in fortification and harmonization; many international organizations participated in the meeting; glad to see Turkmen participants – a leader in the region – first started iodination and fortifies through the state almost 100% of flour (or about 90% of all flour); Uzb have established revolving fund and making great progress; grateful to our consultant; Prof. Omar Dari make a contribution to the program as well; grateful to Dora, GAIN Panagides, we always feel your support and interest in harmonization since the latter is beneficial for trade, flow of commodities.

Dora, GAIN: thanks Shamil for support and drafts and incredible work; Yury was also instrumental; Quentin, GAIN, Gan,, also each and everybody. Country teams contributed a lot, in analysis, interest, in regional harmonization and promotion of regional trade, for all your work on presentations. We will work on your suggestions, and proposals and will prioritize and lastly thanks to Yulia for logistics and agenda, for everyday work. Welcome to Thursday session.