

Technology Dialogue Report

Improving Nutritional Status through Consumption of Quality Protein Maize in Ethiopia.

Report

Kuriftu Resort & Spa, Adama

Saturday, 14 May 2016

This report was prepared by Technology Transfer and Research Translation Directorate, at the Ethiopian Public Health Institute

This technology brief was informed by the following technology brief: improving nutritional status through consumption of quality protein maize in Ethiopia.



Addis Ababa

Ethiopia

July 23, 2016

What is a technology dialogue?

A structured discussion focused on an evidence-based technology brief
The agenda from the technology Dialogue is attached as Appendix 1

Who participated in the dialogue?

People with relevant expertise and perspectives, including Policymakers, civil society, the mass media and researchers
The complete list of participants is attached as Appendix 2

What is an evidence-based technology brief?

Evidence-based technology briefs bring together global technology evidences to inform policy makers about best available health technologies which have public health importance.

***What was the aim of The technology dialogue?**

That discussion and careful consideration should contribute to well-informed health technology Decisions

The dialogue did not aim to reach a consensus or make decisions

What is included in this report?

Views, opinions and insights of individual participants reported without attribution
The opinions included in this report reflect the understanding (or misunderstanding) of individual participants in the dialogue

These opinions may or may not be consistent with or supported by the policy brief or other evidence

It should not be assumed that the opinions and insights in this report represent a consensus of the participant unless this is explicitly stated

Table of Contents

<i>Background</i>	3
<i>Findings</i>	4
<i>Public Health Importance</i>	4
<i>Applicability and Equity</i>	4
<i>Opportunities</i>	4
<i>Policy Contexts</i>	4
<i>Barriers in adopting QPM</i>	5
<i>Ways forward</i>	5
<i>Appendix 1: Agenda</i>	6
<i>Appendix 2: Participants</i>	8

The views, opinions and insights in this report reflect the understanding (or misunderstanding) of individual participants in the dialogue. These opinions may or may not be consistent with or supported by the policy brief that informed this dialogue or other evidence. It should not be assumed that the opinions and insights in this report represent a consensus of the participants unless this is explicitly stated. Nor should it be assumed that they represent the views of the authors of this report.

Background

It was pointed out that there are seven varieties of quality protein maize (QPM) in Ethiopia among which yellow QPM-545 is the most acceptable. It was also mentioned that QPM has important essential amino-acids; like lysine & tryptophan and more Vitamin A, which are not found in conventional maize. QPM could provide essential amino acids, however, there is no simple quality assurance mechanism in place to tell apart QPM and conventional maize for consumption at house-hold level or food industry level.

It was also underlined that the Ministry of Agriculture is well aware of the importance of QPM and has planned to raise the share of QPM to 10% of total maize production. Currently more than 9 million farmers in Ethiopia grow maize, which is the highest compared to other crops.

Though QPM is useful for the rural population, where there is very limited access to protein rich foods; there is lack of awareness at households and food industries level about the usefulness of quality protein maize (QPM). In an effort to increase awareness on importance of QPM, 11 videos were distributed for health extension workers for demonstration of ingenious food preparation using QPM for feeding at house-hold level in Ethiopia.

If QPM is to be used by food industries the value chain should be given due consideration. Besides the issue of availability of sufficient production of QPM either for household consumption or for the industries is a big concern and should be addressed.

Currently there are ten food industries whose input are 80% maize and 20% soya-bean showing the huge potential market for QPM. However, quality of local maize is a big concern; for example the corn flakes prepared from domestic maize has a problem to absorb milk during consumption. Due to this problem, the food industries importing maize from South Africa. The issue of large scale production and its sustainability is a big challenge at present.

The issue of QPM being easily attacked by aflatoxin was also raised. It was mentioned that yellow QPM is especially attacked more due to its susceptibility to ear rot and aflatoxin accumulation. However, it was also mentioned that aflatoxin is a problem to all types of maize, and the problem is milder at highlands of Ethiopia.

Findings

It was raised that the table of the summary of findings should be revised as two of the randomized controlled trials in the table are also included in the meta-analysis. It was also noted that; from the table it is not clear whether the impact on child growth is due to QPM consumption only or due to other confounding factors.

Public Health Importance

It was noted that the technology brief mentioned the public health importance of QPM for children. However, it is known that QPM is important to adults also and should be stated so in the technology brief.

Applicability and Equity

It was underlined that QPM could be used in various ways: can be used for making porridge, biscuit, cracked grain, 'absit' (starter for *enjera* preparation) and as an input for food industries and for animal food. QPM is also suitable for school feeding and emergency feeding.

QPM is as low cost source of quality protein could help poor households who do not have access to nutritious foods. Small scale entrepreneurs could play a major role in increasing production of QPM thereby increasing access to poor households both in the rural and urban areas.

Opportunities

The establishment of an agro-industry park in the country is one good opportunity for possible promotion of QPM. The on-going effort for searching high quality QPM seeds is another opportunity for its widespread consumption in the future. The expansion of small scale entrepreneurs in our country is also another opportunity to commercialize QPM.

Policy Contexts

The fact that the Federal Ministry of Agriculture of Ethiopia has planned to raise the percentage of QPM production to 10% of the total maize production shows the government's strong commitment. Besides QPM is part of the agricultural extension program. Efforts to map the value chain of QPM production in the country are underway.

Barriers in adopting QPM

QPM value chain from production up to house-hold users and food industries is not well organized and there is no subsidy for QPM seed production in our country. No quality control mechanism is in place for QPM seed from production up to its use; and this could hamper its widespread use. The association of aflatoxinwith QPM is a possible problem to the widespread use of QPM.

Ways forward

- Need of QPM value-chain which can benefits individual farmers, house-holds and owners of food industries.
- Presenting the final technology brief of QPM to food and nutrition science of Ethiopia (FoNSE)
- Submitting the technology brief of QPM to ministry of health and food, beverages & pharmaceutical institute.

Appendix 1: Agenda

Technology Dialogue on Improving Nutritional Status through Consumption of Quality Protein Maize in Ethiopia.

Technology Transfer and Research Translation Directorate

Ethiopian Public Health Institute

(Kuriftu Resort & Spa, Adama, 14 May 2016)

Time	Activity	Responsible Person
8:00-9:00 AM	Registration	Wude and Dr Fasil
9:00 -9:15 AM	Opening Remarks/ Introduction of participants & moderators	Dr. Yibeltal Assefa
9:15-9:30AM	Objective of the policy dialogue & Overview of TTRTD	Dr. Mamuye Hadis
9:30-9:55AM	Going through the technology brief document	Participants
9:55-10:00AM	Brief presentation on technology brief	Mr Desalegn Ararso
10:00-10:10 AM	Procedure and rules of the dialogue	Dr Kebede Abegaz.
10:10-10:30 AM	Tea/Coffee break	Organizers
10:30-11:00 AM	Participants discussion on Problem section of the brief and Quality Protein Maize (QPM) as a solution	Dr Kebede Abegaz
11:00-11:30 AM	Participants discussion on Available evidences on the importance of QPM	Dr Kebede Abegaz
11:30-12:00 AM	Participants discussion on Policy contextualization & next steps	Dr Kebede Abegaz
12:00-12:15 PM	Way forward	Dr Kebede Abegaz
12:15—12:30 PM	Closing Remarks	Dr. Yibeltal Assefa
12:30-12:55 PM	Lunch	Organizers

Appendix 2: Participants

EdossaAdugna

House of People Representative (HPR)

Addis Ababa, Ethiopia

Telephone:0911894161

Email: edoadugna@yahoo.com

Dr KebedeAbegaz

Hawassa University

Hawassa

Telephone : 0912021734

Email: abegaz2005@yahoo.co.uk

Muhaja Abdu

House of People Representative (HPR)

Addis Ababa, Ethiopia

Telephone: 0924115126

Email: amunamuhj15@gmail.com

KumeraTerfa

Addis Ababa Regional Health Burea

Telephone: 0922879233

Kumerat2012@gmail.com

AbiyotAsfaw

Haromaya University

Telephone :0933783750

Email: abinahom21@gmail.com

Dr NamukoloCovic

International Food Policy & Research
Institute (IFPRI)

Telephone: 0965178519

Email:n.covic@cgiar.org

AwekeKebede

Federal Ministry of Health of Ethiopia

Addis Ababa

Telephone: 0911436002

Email: awekekeb@gmail.com

BeakalZinab

Jimma University

Jimma

Telephone : 0917809920

Email : beakalzinabi@gmail.com

BeakalZinab

Jimma University

Jimma

Telephone : 0917809920

Email : beakalzinabi@gmail.com

Omer Seid

Mekelle University

Mekelle

Tele : 0913173407

Email : seoumer@yahoo.com

BekeleMekuria

Food, Beverage & Pharmaceutical
Institute

Addis Ababa

Tele: 0910787809

Email: bekelemek@yahoo.com

Dr Adefris T/Wold

CIMMYT

Tele: 0911113190

Email: Ateklewold@cgiar.org

ZinabTazeze

Ethiopian Somale Regional Health Bureau
Jigjga
Tele: 0912242573
Email :zimanle2000@gmail.com

EPHI Team**Dr Mamuye Hadis (PhD)**

Technology transfer & research
translation Directorate
Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone : 0912155368
Email: mamuye.hadis@gmail.com

Desalegn Ararso (MPH)

Technology transfer & research
translation Directorate
Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone: 0911909498

Dr Fasil Mengistu (MVPH)

Technology transfer & research
translation Directorate
Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone: 0915947515
Email: mengistufasil@gmail.com

Observers**Dr Abraham Ali**

Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone : 0911861774
Email :abraalimo@yahoo.com

Tesfaye T/Mariam

Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone : 0913970047

Wondewosen Beyene

Ministry of Science & Technology of
Ethiopia
Addis Ababa
Tele :0913597177
Email :wende.wow@gmail.com

Serebe Abay (MPH)

Technology transfer & research
translation Directorate
Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone: 0913463534
Email: serebeabay@yahoo.com

Yosef G/Yohanis (MPH)

Technology transfer & research
translation Directorate
Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone: 0932974092
yosephgy@gmail.com

Masresha Tesema

Associate Researcher(PhD fellow)
Food & Nutrition Science Directorate
Addis Ababa
Ethiopia
Telephone:0919782082
Email:masresha88@gmail.com

Observers

Tsehai Assefa
Ethiopia Public Health Institute
Addis Ababa, Ethiopia
Telephone : 0911893690
Email :tsehaiassefa@yahoo.com

ZekariyasGetu

Ethiopia Public Health Institute
Addis Ababa, Ethiopia

