Financial support for this work was provided by the Government of Japan through the Japan Scaling Up Nutrition (SUN) Trust Fund.
• Agenda for Dissemination Event (Webinar) held on 11 June 2020
• Main presentation given at event by NSmartAg team
• Short report on event

NSmartAg material is available online here: https://bit.ly/nsmartag-homepage

Social Media: @WBG_Agriculture #NSmartAg #Nutrition
The event will present the concept of Nutrition Smart Agriculture (NSmartAg), and its potential to guide supply-side decisions to make available diversified, safe, and nutrient-rich foods. Nutrition-smart investments in agriculture are those that achieve the double objective of contributing to improving nutrition while increasing farm and/or agribusiness-level productivity or revenue – the drivers for agribusiness investment.

The event will also showcase NSmartAg Country Profiles that aim to provide a developing snapshot of country-specific agricultural and nutritional challenges, while advancing recommendations on entry points for investment and what type of nutrition smart agriculture interventions could be developed. The case of the Democratic Republic of Congo will be presented.
1. Motivation

With the exception of biofortification, the nutrition agenda within the agriculture sector has yet to make a convincing case for farmers and agribusinesses in how the food production and nutrition objectives align.

The climate smart agriculture agenda has been successful in mainstreaming climate change mitigation and adaptation into agriculture investments.

Food is the single strongest lever to optimize human health and environmental sustainability on Earth – EAT Lancet Commission report on Healthy Diets from Sustainable Food Systems.
2. What is Nutrition Smart Agriculture (NSmartAg)?
3. Relation to Nutrition Sensitive Agriculture

**Nutrition-sensitive agriculture (NSA)** aims to "ensure the production of a variety of affordable, nutritious, culturally appropriate and safe foods in adequate quantity and quality to meet the dietary requirements of populations in a sustainable manner" (FAO).

**Nutrition Smart Agriculture** is a set of agriculture/agro-processing technologies and/or practices that both contribute to the improvement of human nutritional status of the local population and increase of the farm and/or agribusiness-level productivity/revenue.
Focus on:

Nutrition Sensitive Agriculture

R&D       Inputs       Primary production       Agri-food processing and distribution       Retail       Consumers

Policy and regulation       Financing       Infrastructure
4. Objective of this work

To develop nutrition smart agriculture country profiles for Democratic Republic of Congo, Guatemala, Haiti and Mozambique so as to engage the agriculture sector in a country-specific policy dialogue with emphasis on nutritional improvement and identification of potential investments.

• Provide useful background for agro-food colleagues to engage in discussions with other sectors to advance multisectoral solutions to malnutrition.
5. Partners
7. NSmartAg methodology steps

**EXAMPLE**

1. Identify malnutrition problems
   - Experts consultation
   - Strategies, policies, studies

2. Identify food consumption and production
   - Available HH surveys
   - Agriculture census data

3. Identify key nutrients needed
   - Expert nutritionist
   - Nutrient Adequacy Analysis
     - Ideal level of consumption of iron
     - Actual level of consumption of iron

4. Identify NSmartAg solutions
   - Data analysis
   - Experts consultation
   - Enterprise survey

**Identify food groups and potential food items that are being produced and can help bridge the gap**
Nutrient Adequacy Analysis & Identification of Opportunities

Consumption

Production

Identification of deficiencies

cross check

candidate products
6. NSmartAg country profiles outline

I. NATIONAL CONTEXT
   1. Key facts on malnutrition
   2. Key facts on food production (supply)
   3. Key facts on food consumption (demand)

II. NSmartAg PRACTICES AND TECHNOLOGIES

III. INSTITUTIONS AND POLICIES LINKING AGRICULTURE AND NUTRITION

IV. ONGOING AND PLANNED INTERVENTIONS IN AGRICULTURE AND NUTRITION

V. OUTLOOK FOR NSmartAg
I. NATIONAL CONTEXT

Key facts on malnutrition

Key facts on food production

Key facts on food consumption

Key macro- and micronutrients selected for inclusion

protein, vitamin A, iron and zinc
II. NSmartAg PRACTICES AND TECHNOLOGIES

### Value Chain Segment
- **Adoption of fortified (p合わせ)(vitamin A)**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly vitamin A), and may contribute increased protein intake if consumed more.
  - **Contribution to Nutrition**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: West, Eastern, Central, North.

- **Adoption of fortified (p合わせ)(iron)**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron) and may contribute increased protein intake if consumed more.
  - **Contribution to Nutrition**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: East, Central, North.

- **Adoption of fortified (p合わせ)(vitamin B12)**
  - **Practices and Technologies**: Provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Increased intake of high-quality protein that contribute to animal growth.
  - **Market Potential**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: Central, South, Western.

- **Adoption of fortified (p合わせ)(vitamin A)**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron) and zinc, and vitamin A.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: East, Central, North.

- **Production of fish**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and vitamin A).
  - **Contribution to Nutrition**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: East, Central, North.

- **Production of vegetables**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and vitamin A).
  - **Contribution to Nutrition**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: Eastern, Central, North.

- **Production of nuts**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: Eastern, Central, North.

- **Production of poultry**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Large market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: Eastern, Central, North.

- **Production of pulses**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and may contribute increased protein intake if consumed more.
  - **Contribution to Nutrition**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Market Potential**: Small market size; expectation for market growth (Kisii, Nandi, Eldoret, Kitale).
  - **Where**: Western, Central, North.

- **Production of seedless or pitted lentils**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc, and vitamin A).
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: Eastern, Central, North.

- **Production of fruits**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and vitamin A).
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: Eastern, Central, North.

- **Production of oil seeds**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: Eastern, Central, North.

- **Production of legumes**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: Eastern, Central, North.

- **Production of soybeans**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: Eastern, Central, North.

- **Transport of fish**
  - **Practices and Technologies**: Addresses micronutrient deficiencies (mainly iron and zinc) and provides an additional source of protein consumption.
  - **Contribution to Nutrition**: Large market size; expectation for market growth (East, Central, North).
  - **Market Potential**: Large market size; expectation for market growth (East, Central, North).
  - **Where**: Eastern, Central, North.
III. INSTITUTIONS AND POLICIES RELEVANT FOR NSmartAg in DRC

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013 National Agricultural Investment Program (Programme National d’Investissement Agricole, PNIA)</td>
<td>Rests on a pillar intending to manage food and nutrition security, and strategic food reserves. Calls for actions that contribute to improved nutrition.</td>
</tr>
<tr>
<td>National Multisectoral Strategic Nutrition Plan (Plan National Stratégique Multisectoriel de Nutrition, PNSMN) 2016–2025</td>
<td>Calls for the agriculture sector to respond to malnutrition with increasing availability and access to diversified foods, including bio-fortified crops and fortified foods; and Calls for the strengthening of governance and multisectoral coordination for nutrition</td>
</tr>
<tr>
<td>National Policy on Food and Nutritional Security (Politique Nationale de Sécurité Alimentaire et Nutritionnelle, PNSAN) 2018–2030</td>
<td>Calls for increasing local agricultural productivity; improving physical and economic access to food; and Aims to develop sustainable value chains in family farms and small and medium-sized agro-enterprises.</td>
</tr>
<tr>
<td>National Plan for Fortification (Plan national pour la fortification, PNF)</td>
<td>Aims to promote the addition of vitamins and minerals, iron, iodine in locally processed food products.</td>
</tr>
</tbody>
</table>

### IV. ONGOING AND PLANNED INTERVENTIONS IN AGRICULTURE AND NUTRITION

<table>
<thead>
<tr>
<th>NSmartAg activity</th>
<th>Program name (duration)</th>
<th>Development partner</th>
<th>Target areas</th>
<th>Brief description as related to NSmartAg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biofortification</td>
<td>Multisectoral child nutrition and health project (2019-2025)</td>
<td>World Bank</td>
<td>Kwilu, Kasai, South Kivu</td>
<td>Roll out of biofortification (maize, beans, cassava, orange fleshed sweet potato)</td>
</tr>
<tr>
<td>NSmartAg menu of options</td>
<td>National Agriculture Development Program (under preparation)</td>
<td>World Bank</td>
<td>Kwilu, Kasai, Kasai Central, North Kivu,</td>
<td>Direct farmer support to agricultural productivity</td>
</tr>
<tr>
<td></td>
<td>Programme de Développement Agricole au Kwilu et Kwango (PRODAKK)</td>
<td>Enabel – Belgian Development Agency</td>
<td>Kongo Central</td>
<td></td>
</tr>
<tr>
<td>Primary production; post-harvest</td>
<td>Agricultural value chain strengthening project (2017 – 2022)</td>
<td>USAID</td>
<td>South Kivu</td>
<td>Value chain development for bananas and pisciculture</td>
</tr>
<tr>
<td></td>
<td>Project for Youth Entrepreneurship in Agriculture and Agro-Business (PEJAB) (2017-2023)</td>
<td>African Development Bank (AfDB)</td>
<td>Kinshasa, Ituri, South Kivu, Kasai, Kasai</td>
<td>Value chain development (various agro-products)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Central, and Kasai Oriental</td>
<td></td>
</tr>
</tbody>
</table>
V. OUTLOOK FOR NSmartAg in DRC

• Mainstreaming NSmartAg into Programs
  • Food safety standards
  • Farmer agriculture input and technology adoption programs
  • Ag R&D investments
  • Extension services
  • Agri MSMEs support programs

• Supporting enabling agribusiness environment
  • Agriculture contributes to nutrition (not just food security)
  • Institutionalize nutrition expertise
  • Invest in infrastructure and food safety
  • Continue to cooperate with other ministries in educating consumers on the benefits of a diverse diet
The dissemination event discussed how NSmartAg interventions (with a focus on supply-side interventions) could be an entry point for the wider nutrition sensitive agenda.

NSmartAg recommendations complement the broader nutrition sensitive agriculture (NSA) agenda which is formulated under multisectoral nutrition plans/strategies and coordinated across sectors, such as health, social protection and others. In order to transform the notion in the agriculture sector that nutrition is an additional lens to regular agriculture investments to contribute to someone else’s objective, NSmartAg specifically aims to propose readily available investment opportunities that would trigger interest in nutrition from within the agricultural sector.

The event re-confirmed that the objective of this new approach is to continue to support the (NSA) agenda (that focuses on both the consumption and production sides), and to advocate for coordination with ministries of health and other stakeholders in combating malnutrition holistically, while promoting a focus on two dimensions within agri-food systems: i) stronger supplies of quality, safe, nutritious and diverse foods on the one hand, and ii) associated improvements in sales, incomes and socio-economic empowerment of the agri-food producers, leading to greater incentivization and therefore sustainability for the production of such food supplies, that the sector can bring forward as a solution to the table.
• The representatives of international research institutes and the World Bank brought their perspectives on how the approach can help re-energize the nutrition and agriculture discussion at the local level. The experience with Climate Smart Agriculture analyses and country profiles was presented as an example of how Nutrition Smart Agriculture information can have impact on project design and investment.

• The Government of DRC, and in particular the Ministry of Fisheries and Livestock and the Ministry of Agriculture, committed to integrating nutrition into agriculture policies and programs, and stated that it wants to support smallholder farmers and agri-entrepreneurs adopt improved practices and technologies that are climate and nutrition smart.

• A recording of the dissemination event is available here https://bit.ly/nsmartag-homepage
Thank You!

NSmartAg material is available online here: