



Rice Fortification: Making Rice More Nutritious Post Harvesting

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World Food Programme

World Food Programme: Who We Are

- WFP provides food assistance to meet emergency needs, improve food security and increase access to nutritious foods
- On average WFP reaches more than **90 million people** with food assistance in around **75 countries** each year
- WFP distributes approximately **4 – 5 million MT** of food per year
 - Total food procurement incl. transport is over **US\$ 2 billion** per year
 - Rice procurement is around **350,000 MT** per year (>85% from Asia)



Goal: Fortified Rice as the Standard Option

- Fortified rice as the **standard option** in government and other relief programmes, in all WFP programmes, and widely available on the commercial market
- Adding essential vitamins and minerals to rice helps make people **healthier, smarter and stronger**
- Build on experience with **flour fortification**, mandatory in 78 countries



WFP School feeding programme



School feeding trial with fortified rice in Cambodia

Why Fortify Rice with Micronutrients?

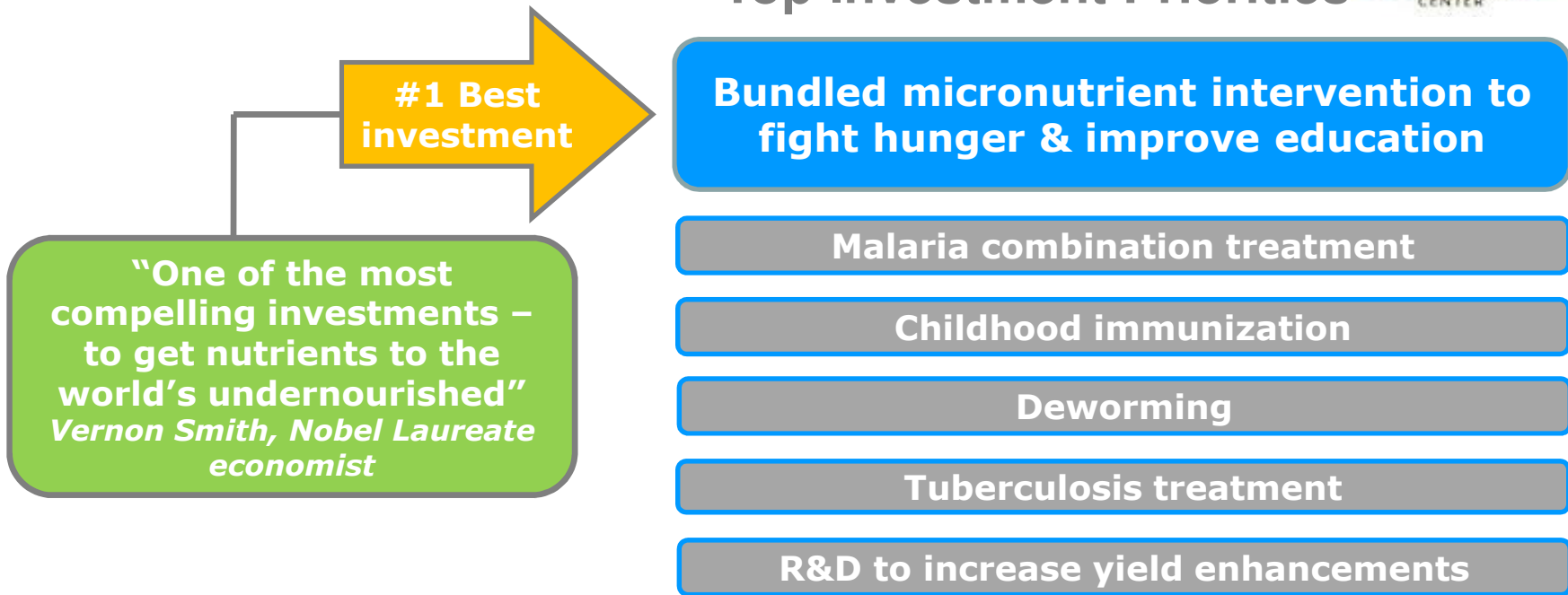
Three **main benefits** of staple food fortification:

1. Improved Health
 2. Increased Productivity
 3. Economic Progress
- Micronutrient malnutrition affects **2 billion people** world wide, and is one of the main causes of poor health and disability
 - **Rice** is the main staple for **3 billion people**, concentrated in developing countries. Rice fortification enables consumers to improve their micronutrient intake without changing their buying and eating habits
 - Staple food fortification is a proven **cost effective strategy** to address micronutrient deficiencies (e.g. salt, flour and oil fortification)
 - Time is right: next to WFP rice fortification is **supported by governments and key global organizations**

Fortifying Rice: a Smart Investment



Top Investment Priorities



Investment in Nutrition:

Break circle of poverty

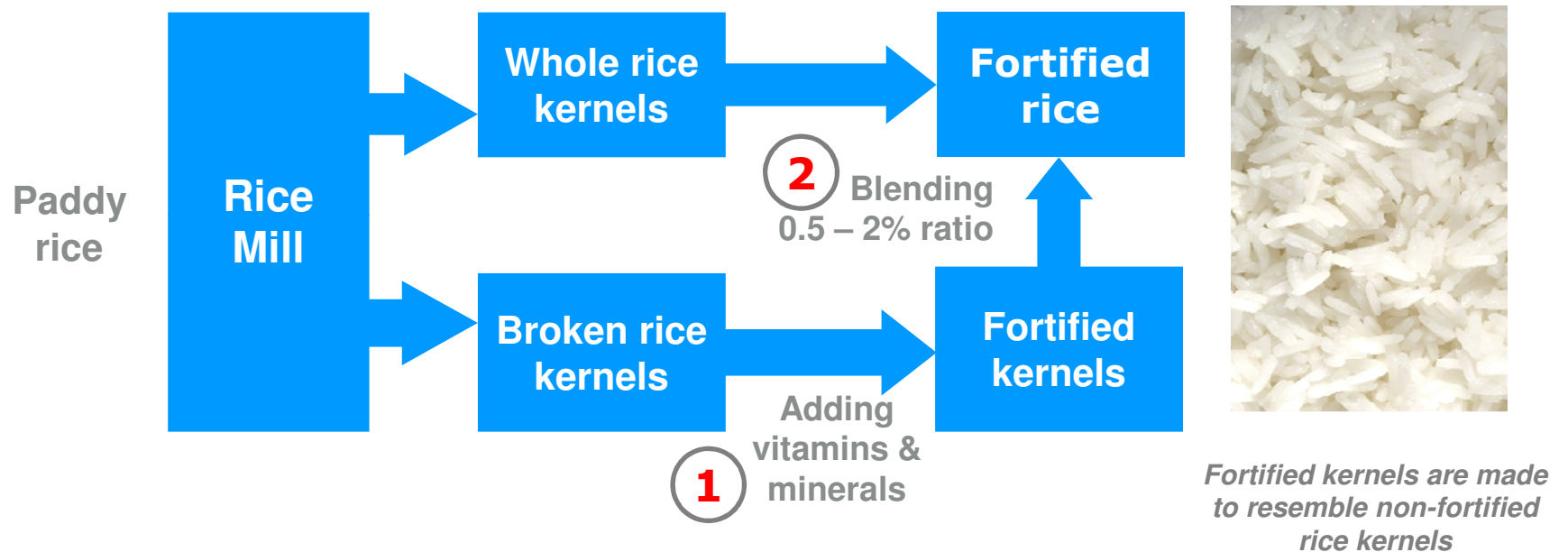
1 US\$ can result in return of up to 30 US\$

Increase country's GDP by at least 2-3% annually



Fortified Rice – Nutritious Rice with Added Vitamins & Minerals

- **Fortifying rice:** making rice more nutritious by adding essential vitamins and minerals (micronutrients) needed for productive and healthy life
- Fortifying rice with extrusion technology is straightforward **two-step process:**

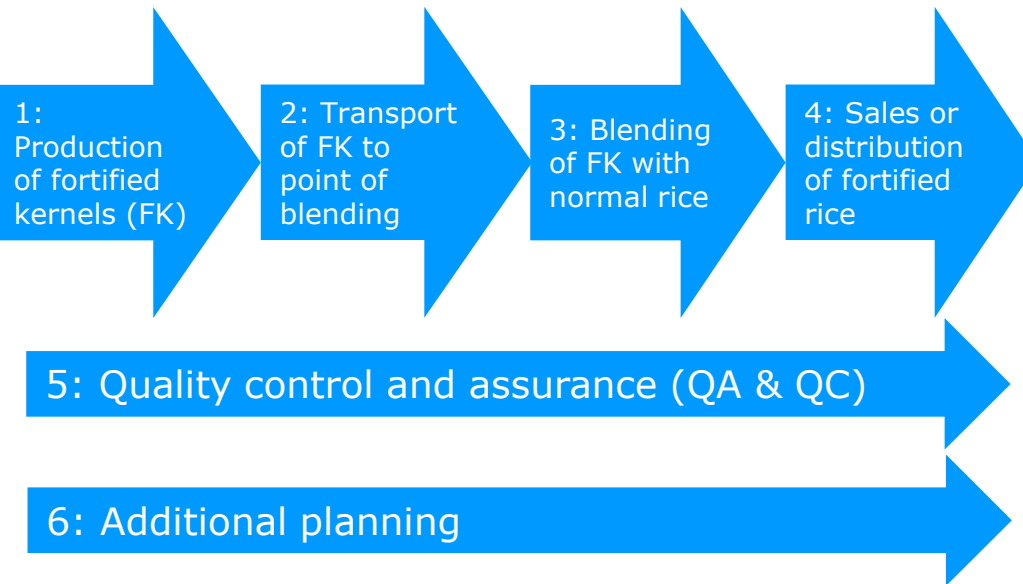


Rice Fortification – Implementation & Costs

Introduction phase

- Local evidence on acceptability
- Health needs assessment
- Logistical feasibility
- Value chain analysis
- Policy development
- Project management

Core cost components of rice fortification



Scale-up phase

- Greater efficiency in supply chain
- Social marketing; advocacy
- Economies of scale
- Commercialization

Cost to fortify rice in school meal (lunch) for entire year is approx. 0.20 – 0.80 US\$ per child

Costs →

Rice Fortification Initiatives

- WFP involved in multiple high-profile pilot studies to:
 - Establish best practices & build capacity
 - Demonstrate impact and acceptability
 - Build on evidence base
- Advocacy and communication of trial results and activities to grow consumer awareness:
 - Informing opinion leaders
 - Local workshops
 - Communication material – graphics
- Issuing of WFP fortified rice tenders – first tender in 2013 for Swaziland



Scaling Up Rice Fortification

- Alliances and partnerships with key stakeholders:
 - Ministries and Government Organizations
 - Rice millers and traders
 - NGO's active in food distribution and technology development
 - Commercial partners
- As of 2014 fortified rice will be on the USDA Commodity List (CRD)
- Building on experience gained with scaling up flour, salt and oil fortification



Thank you



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