Dryland cereals like millets and sorghum, and grain legumes are Smart Food.

How are they Good for You?

These Smart Food crops are highly nutritious and targeting some of the largest micronutrient deficiencies and needs, especially of women and children. For example:

- Iron, zinc and folic acid - Pearl millet has very high levels and bioavailability studies have shown that they will provide the average person’s daily requirement of iron and zinc.
- Calcium - Finger millet has 3 times the amount compared to milk.
- Affordable - provided by grain legumes.
- Low Glycemic Index - which means escalating levels of diabetes – can be avoided or managed by sorghum because they have low Glycemic Index.
- Contains high antioxidants - Fights against heart diseases, obesity, and cancer
- Gluten Free

Aims of the Smart Food initiative

A Smart Food initiative has been developed with the aim to mainstream Smart Food back as in developing countries – bringing diversity in diets and on the farm. This is to make a major breakthrough in overcoming malnutrition and rural poverty, and being more sustainable on the environment.

The approach

The overall approach is based on:

1. Creating a demand pull by the consumer.

This will be done through campaigns and needs to be complemented with: scientific backing to any claims; full-value chain support; and ensuring smallholder farmers and rural communities benefit their income and nutritionally from the market growth.

Concerted efforts on millets and sorghum, as well as grain legumes. There will be a geographic focus on countries where these crops traditionally grew (Africa, India and other areas of Asia), as well as the major, influential markets in the West (USA, Europe and Australasia).

The methodology, as shown in the diagram, will include:

1. Creating the Smart Food concept and messaging:
   - This will include building a strong scientific case for selected Smart Food, developing the marketing approach and building an accreditation scheme for Smart Food.

2. Creating a demand pull with consumers:
   - This will include promoting a modern image for the selected Smart Food through an intensive and highly creative viral campaign, complemented with facilitating innovative, and nutritious convenience food products. From policy makers to urban aspirational markets, rural communities, processors and investors will be engaged, along with the food service, media and health industries.

3. Ensuring smallholder farmers and rural communities are pulled out of poverty and hidden hunger:
   - This will require a concerted effort working with rural health workers, connecting farmers to the value chain and advocacy for research and development and supporting policies.

4. Filling the knowledge gaps:
   - Identify and address the gaps and scientific research needs on how these foods affect you (nutrition and health), the planet, the farmer and the whole value chain.

THE APPROACH

A new approach is needed if we are to make a major change and bring Smart Food into the mainstream. This approach is based on selecting some Smart Food and have a ‘focused avid investment’; and driving a demand pull by consumers.

Implementation at country level:

1. Creating the Smart Food concept and messaging

   - Facilitate modern convenience products by:
     - Raising awareness among processors
     - Overcoming barriers like knowledge, equipment and grades/standards
   - Facilitate the health, food service, export and media industries through engagement, activities and information sharing

2. Creating a demand pull with consumers

   - Launching a campaign to create a buzz around millets through social media, mass media and reality shows and ambassadors.

3. Ensuring smallholder farmers and rural communities benefit

   - Linking Farmer Producer Organisations with supply processors and other users
   - On-farm value addition before selling
   - Developing branded franchised millet products with women self-help groups

4. Filling the knowledge gaps:

   - Working with health workers to introduce millet into the advice given
   - Developing menus to include millets into midday meal feeding programs and implementing with a school campaign

How are they Good for the Smallholder farmer?

Smart Food is good for the smallholder farmers because

- Their climate resilience means they are a good risk management strategy.
- Legumes have an important contribution to soil fertility and generally add a yield plateau and have great potential for productivity increases.
- Their multiple uses and untapped demand means they have a lot more potential.
- Unlike the other crops they have not yet reached their full potential are – very little investment, significantly underdeveloped value chains, and the image of the food as old fashioned, especially the case for millets and sorghum.
- More investment and policy support have significant potential to increase yields, provide better nutrition, fulfill multiple uses (food, feed, biofuels, brewing), develop modern processed food products and integrate farmers into the value chain.

How are they Good for the Planet?

These are also crops critical in the drylands that will best survive the harsh environments and are most resilient hence climate smart crops. Basically, millets are the last crop standing in times of drought. The millets, sorghum and legumes have lowest water and carbon footprints of all the crops.

The major constraints

The major constraints for these dryland cereals and grain legumes that are holding them back from reaching their full potential are – very little investment, significantly underdeveloped value chains, and the image of the food as old fashioned, especially the case for millets and sorghum.

More investment and policy support have significant potential to increase yields, provide better nutrition, fulfill multiple uses (food, feed, biofuels, brewing), develop modern processed food products and integrate farmers into the value chain.

The Smart Food movement:

Smart Food is a global initiative founded and coordinated by ICRIStA.

Contact:
Joanna Kane-Potaka
Write to: Smartfood@icrisat.org
Contact:
www.smartfood.org

November 2017

Good for the planet, the farmer and the whole value chain.

How are they Good for You?

These Smart Food crops are highly nutritious and targeting some of the largest micronutrient deficiencies and needs, especially of women and children. For example:

- Iron, zinc and folic acid - Pearl millet has very high levels and bioavailability studies have shown that they will provide the average person’s daily requirement of iron and zinc.
- Calcium - Finger millet has 3 times the amount compared to milk.
- Affordable - provided by grain legumes.
- Low Glycemic Index - which means escalating levels of diabetes – can be avoided or managed by sorghum because they have low Glycemic Index.
- Contains high antioxidants - Fights against heart diseases, obesity, and cancer
- Gluten Free

Aims of the Smart Food initiative

A Smart Food initiative has been developed with the aim to mainstream Smart Food back as in developing countries – bringing diversity in diets and on the farm. This is to make a major breakthrough in overcoming malnutrition and rural poverty, and being more sustainable on the environment.

The approach

The overall approach is based on:

1. Creating a demand pull by the consumer.

This will be done through campaigns and needs to be complemented with: scientific backing to any claims; full-value chain support; and ensuring smallholder farmers and rural communities benefit their income and nutritionally from the market growth.

Concerted efforts on millets and sorghum, as well as grain legumes. There will be a geographic focus on countries where these crops traditionally grew (Africa, India and other areas of Asia), as well as the major, influential markets in the West (USA, Europe and Australasia).

The methodology, as shown in the diagram, will include:

1. Creating the Smart Food concept and messaging:
   - This will include building a strong scientific case for selected Smart Food, developing the marketing approach and building an accreditation scheme for Smart Food.

2. Creating a demand pull with consumers:
   - This will include promoting a modern image for the selected Smart Food through an intensive and highly creative viral campaign, complemented with facilitating innovative, and nutritious convenience food products. From policy makers to urban aspirational markets, rural communities, processors and investors will be engaged, along with the food service, media and health industries.

3. Ensuring smallholder farmers and rural communities are pulled out of poverty and hidden hunger:
   - This will require a concerted effort working with rural health workers, connecting farmers to the value chain and advocacy for research and development and supporting policies.

4. Filling the knowledge gaps:
   - Identify and address the gaps and scientific research needs on how these foods affect you (nutrition and health), the planet, the farmer and the whole value chain (cooking, processing, marketing, etc).