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 protein - provided by grain legumes.
- Low Glycemic Index - which means escalating levels of diabetes - can be avoided or managed by sorghum and millets because they have low Glycemic Index.
- High antioxidants - fights against heart diseases, life style disorders and cancer
- Gluten Free

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 having a “focused and investment”; and driving a demand pull by consumers.

Implementation at country level:
1. Creating the Smart Food concept and messaging
2. Creating a demand pull with consumers
3. Ensuring smallholder farmers and rural communities benefit
4. Filling the knowledge gaps: How these foods affect you (nutrition and health), the planet, the farmer and the whole value chain.

Smart Food helps solve our number of the biggest issues in unison: rural poverty, malnutrition and adaptation to climate change and environmental degradation.

A major impact can be made if we not only popularize but also mainstream Smart Food – bringing diversity in diets and on the farm.

This must be undertaken, ensuring rural communities benefit through better health and livelihood improvements. Other global benefits will be new market development and growth and more sustainable diets.

How are they Good for the Smallholder farmer?

Smart Food are good for the small holder farmers because
- Their climate resilience means they are a good risk management strategy.
- Legumes have an important contribution to soil nutrition and when rotated with other crops, increase the water use efficiency of the entire crop cycle.
- Their multiple uses and untapped demand means they have a lot more potential.
- Unlike the other crops they have not yet reached a yield plateau and have great potential for productivity increases.

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 close to the 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.

Aims of the Smart Food initiative

A Smart Food initiative has been developed with the aim to mainstream Smart Food back as a staple 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:
- Starting with 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 small holder 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 grow (Africa, India and other areas of Asia), as well as the large, influential markets in the West (USA, Europe and Australia).

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.).

Partner on the Smart Food initiative

Significant impacts and mainstreaming Smart Food can only be achieved through partnership. This requires a wide variety of players: from the food, retail and catering industries (new entrepreneurs to multinationals); the health industry; marketers; social media players and governments to development agencies, foundations and NGOs.

Join the Smart Food Movement

Contact: Joanna Kane-Potaka
Write to: SmartFood@cgiar.org
www.icrisat.org/SmartFood
www.smartfoodindia.in

October 2017

Good for you – the planet – the farmer