COMMERCIALIZING DRYLAND CEREALS THROUGH PRODUCT DEVELOPMENT, SCIENTIFIC VALIDATION AND ENTREPRENEURSHIP

INTRODUCTION

- Dryland cereals are nutritious, gluten free, diabetic friendly and rich source of antioxidants.
- Low commercialization due to lack of:
  - R&D on use of dryland cereals in product formulation.
  - Understanding of nutritional and functional properties.
  - Knowledge on processing dryland cereals.
  - Validation on content and claims of products using dryland cereals.
  - Support to SMEs and market linkages for the farmers.
- Need for an ecosystem to create market demand for dryland cereals (Fig. 1).

MATERIALS AND METHODS

- Products formulated using sorghum/millet as ingredient.
- Nutritional profiling and shelf-life as per standard protocols.
- Validate products for: sorghum/millet content in formulations, prebiotic and probiotics, claim of “diabetic friendly” parameters.
- Sensory analysis to ensure product acceptability (triangle test and acceptability studies).
- Pilot scale-up trials at third party manufactures for process optimisation.
- Technology transfer, business incubation and marketing support by ABI & INP program.

RESULTS

<table>
<thead>
<tr>
<th>Products formulated and validated</th>
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<tbody>
<tr>
<td><strong>Product</strong></td>
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<tr>
<td>Smart Brilliants</td>
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<tr>
<td>Millet Cookies</td>
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<td>Extruded Snacks</td>
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<td>Energy and Nutrient Dense Food (ENDF)</td>
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Fig. 1: Ecosystem at the Agribusiness and Innovation Platform (AIP), ICRI SAT to promote dryland cereals through product development, scientific validation and entrepreneurship.

DISCUSSIONS

Scaling of the proven models of commercializing dryland cereals using an ecosystem that facilitates sustainable development is the way forward for creating demand pull for these crops. Strengthening of partnerships with the private sector and the government agencies involved in addressing malnutrition (ICDS-supplementary nutrition programs and the mid-day meal schemes) are being pursued to further increase the demand.

REFERENCES


K.K. Sharma, S. Datta Mazumdar, R. Banerjee, P. Durgalla, A. Selvaraj, J. Philroy
International Crops Research Institute for the Semi-Arid Tropics, India
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