

Innovative Agro-Processing for Climate-Smart Food Systems

Sustainable Development Goals (SDGs)

- SDG 1: No Poverty
 - o Target 1.5: Build resilience to climate and economic shocks.
 - → Agro-processing enhances rural incomes and reduces vulnerability.

SDG 2: Zero Hunger

- o **Target 2.1**: Ensure access to safe, nutritious, and sufficient food.
- Target 2.2: End all forms of malnutrition.
- Target 2.3: Double productivity and incomes of small-scale producers, especially women.
 - → The Chair improves nutrition and supports value chains for smallholders.

SDG 3: Good Health and Well-being

- **Target 3.4:** Reduce mortality from non-communicable diseases through healthier diets and food environments.
- → By promoting safe, nutritious, and low-fat/sugar/salt processed foods, the Chair helps shift consumption patterns toward better health.
- **Target 3.9:** Substantially reduce deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination.
- → Cleaner processing technologies and better food safety standards mitigate health risks linked to poor-quality food processing.

SDG 4: Quality Education

- **Target 4.3:** Ensure equal access for all to affordable and quality technical, vocational and tertiary education.
- \rightarrow The Chair fosters university-industry collaboration and builds practical training programmes in agro-processing for youth and women.
- **Target 4.4:** Increase the number of youth and adults with relevant skills for employment and entrepreneurship.
- → Through innovation hubs and hands-on learning, the Chair equips rural communities with competencies for value-added agriculture.
- **Target 4.7:** Ensure learners acquire knowledge and skills needed to promote sustainable development.
- \rightarrow Agro-processing is embedded in climate-smart and sustainability education, with a focus on local resource use, waste reduction, and gender equality

SDG 5: Gender Equality

- Target 5.a: Equal access to resources, technology, and economic opportunities.
 - → Empowers women through food processing training and enterprise support.

SDG 8: Decent Work and Economic Growth

- o **Target 8.3**: Promote entrepreneurship and small enterprises.
- Target 8.5: Achieve productive employment for all, especially youth and women.
 - → The Chair promotes community entrepreneurship and rural agroenterprises.

SDG 12: Responsible Consumption and Production

- o Target 12.3: Halve per capita food waste.
- o **Target 12.5**: Reduce waste generation through circular economy practices.
 - → Focuses on reducing post-harvest losses and transforming food waste.

SDG 13: Climate Action

- o **Target 13.1**: Strengthen adaptive capacity to climate-related risks.
 - → Climate-smart processing solutions enhance food system resilience.

African Union Agenda 2063 - The Africa We Want

- Goal 1: A prosperous Africa based on inclusive growth and sustainable development.
- **Goal 5**: Modern agriculture and agro-processing for increased productivity and value addition.
- Goal 7: Environmentally sustainable and climate-resilient communities.
- Goal 17: Gender equality and women's empowerment in agriculture and food systems.
- Goal 18: Empowered youth engaged in innovation, food enterprises, and technology transfer.

South Africa's National Development Plan (NDP 2030)

- **Chapter 3**: Economy and Employment stimulate agro-processing industries and promote inclusive growth.
- **Chapter 6**: Inclusive Rural Economy support small-scale farmers, reduce post-harvest losses, and build rural agro-enterprises.
- **Chapter 10**: Health Care for All improve diets through better food processing and nutrition.
- **Chapter 5**: Environmental Sustainability reduce food system waste and promote efficient resource use.
- Outcome 4: Decent employment through inclusive economic growth.
- Outcome 7: Vibrant rural communities and sustainable livelihoods.
- Outcome 10: Protected environmental assets through sustainable agriculture.