A bio-based, recycle-reuse economy can feed the world and save the planet – UN agency

Transforming pineapple skins into packaging or fashioning t-shirts from marine refuse may sound far-fetched but it is becoming clearer that an economy based on biomass can help tackle global problems like pollution and climate change, the United Nations agriculture agency said on Friday.

A sustainable bioeconomy, which uses biomass – organic materials, such as plants and animals and fish – as opposed to fossil resources to produce food and non-food goods "is foremost about nature and the people who take care of and produce biomass," a senior UN Food and Agriculture Organization (FAO) official said at the 2018 Global Bioeconomy Summit in Berlin, Germany.

This means family farmers, forest people and fishers, who are also "holders of important knowledge on how to manage natural resources in a sustainable way," she explained.

Maria Helena Semedo, Food and Agriculture Organization (FAO) Deputy Director-General for Climate and Natural Resources, stressed how the agency not only works with member States and other partners across the conventional bioeconomy sectors – agriculture, forestry and fisheries – but also relevant technologies, such as biotechnology and information technology to serve agricultural sectors.

"We must foster internationally-coordinated efforts and ensure multi-stakeholder engagement at local, national and global levels," she said, noting that this requires measurable targets, means to fulfil them and cost-effective ways to measure progress.

She held sway that with innovation playing a key role in the bio sector, we should ensure that all the knowledge – traditional and new should be equally shared and supported.

Feeding the world, saving the planet

Although there is enough food being produced to feed the planet, often due to a lack of access estimates show that some 815 million people globally are chronically undernourished.

"Bioeconomy can improve access to food, such as through additional income from the sale of bio-products," said Ms. Semedo.

She also noted its potential contribution to addressing climate change, albeit with a warning against oversimplification.

"Just because a product is bio does not mean it is good for climate change,

it depends on how it is produced, and in particular on much and what type of energy is used in the process," she elaborated.

FAO has a longstanding and wide experience in supporting family farmers and other small-scale biomass producers and businesses.

Ms. Semedo, informed the summit that with the support of Germany, FAO together with a multistakeholder international sustainable bioeconomy working group is currently developing sustainable bioeconomy guidelines.

Some 25 cases from around the world have already been identified to serve as successful bioeconomy examples to develop good practices.

A group of women fishers in Zanzibar are producing cosmetics from algae – opening up a whole new market with sought-after niche products; in Malaysia, a Government programme supports community-based bioeconomy; and in Colombia, a community is transforming pineapple skins into biodegradable packaging and honey into royal jelly – and these are just a few examples of a bioeconomy in action.

"Together, let's harness the development for sustainable bioeconomy for all and leave no one behind," concluded Ms. Semedo.