

IPBES template for the submission of requests, inputs and suggestions on short-term priorities and longer term strategic needs that require attention and action by IPBES as part of its future work programme.

Name and contact details of individual submitting requests/inputs/suggestions: IUNS Task Force on Sustainable Diets

Date of submission: 28 September 2018

Submission from: IPBES member: _____

Observer allowed enhanced participation in line with decision IPBES-5/4: IUNS (Sustainable Diets' Task Force)

MEA(s): _____

United Nations body: _____

Expert on, and holder of, indigenous and local knowledge: _____

Other Stakeholder(s): _____

Please provide the following information for any request and, where relevant, for any inputs and suggestions (additional attachments can also be submitted):

Request/input/suggestion: Addressing human nutrition and sustainable diets as ecosystem services.

The concept of ecosystem services has been an implied, over-arching principle for the relationship between people and their environment for the entirety of human existence. However, ecosystem services only became explicit, defined and popularised as a result of the Millennium Ecosystem Assessment (MA) in the early 2000s; here, *food* was listed as one of the provisioning ecosystem services. In an important decision-making forum in 2013, the Commission on Genetic Resources for Food and Agriculture (CGRFA) took this one step further, as stated in its meeting report: "...recognizing the importance of linking food biodiversity and the environment sector to human nutrition and healthy diets, and of the concept that *nutrients in food* and *whole diets*, as well as food, should be explicitly regarded as ecosystem services." The multisectoral utility of framing human nutrition as an ecosystem service, consistent with the concept of sustainable diets, has been receiving attention in the research community, but more attention is needed. Nutrition policies and interventions in both the health sector and agriculture sector show long histories of failures, collateral damages and unintended consequences, with casualties extending to biodiversity loss and environmental degradation. Successes using an ecosystem approach show that greater adherence to sustainable diets delivers lower environmental impacts, particularly related to biodiversity and resource depletion. At the same time they show improvements to micronutrient intakes and decreased non-communicable disease risk and prevalence. Important work to date includes case studies on traditional food systems of indigenous peoples, studies on nutrition in rice-based aquatic ecosystems, and activities in several countries studying biodiversity for food and nutrition. Explicit alignment with ecosystems helps clarify the important role of the environment sector, along with health and agriculture, in addressing the multiple burdens of malnutrition. IPBES could take on a pivotal role.

Information to accompany requests submitted to the Platform (see also Decision IPBES-1/3 Procedure for receiving and prioritizing requests put to the Platform):	
1.	Relevance to the objective, functions and work programme of IPBES: Agriculture and food consumption are strong factors in declining biodiversity and environmental degradation. Maintaining biodiversity (agrobiodiversity) is essential to maintain the agricultural base and

	thus our food supply. The requested research will contribute to the scientific base for policy support in the area of sustainable diets that have a positive impact on people's health and on the environment (e.g., biodiversity and climate), particularly on traditional food systems of indigenous peoples.
2.	Urgency of action by IPBES in the light of the imminence of the risks caused by the issues to be addressed by such action: Climate change and loss of species is happening now. At the same time the world faces a nutrition crisis: one out of three people suffers from one or multiple forms of malnutrition, including around 2 B suffering from micronutrient deficiencies and nearly as many suffer from overweight/obesity. This trend needs to be halted urgently. The other contexts - growing population pressure and growing economies - cause even greater pressure on nature. Action is urgently needed to support changing consumption patterns towards more sustainable and healthy ones. This may come with costs. This research may investigate how nutritious foods serve as provisioning ecosystem services, and how sustainable food systems contribute to healthy ecosystems. Indigenous peoples of Small Island Developing States (SIDS) are considered to be among the most vulnerable due their highest prevalences of obesity and diet-related chronic diseases, and to the devastating and dramatic impact that climate change has already had on island communities and ecosystems.
3.	Relevance of the requested action in addressing specific policies or processes: The momentum is there: In the Decade of Action on Nutrition all actors are called on by the UN General Assembly to take actions to promote good nutrition in the context of the sustainable development agenda, which also supports environmental goals. Research may show suitable pathways to address this complex issue, making environmental aspects also financially viable. Policies are being developed to make food systems work better for nutrition, but environmental concerns/services are not always taken into account. This research can contribute to win win outcomes as opposed to trade-offs among health, environment, agriculture and economy.
4.	Geographic scope of the requested action, as well as issues to be covered by such action: From global and local. The issue is relevant all over the world but the context for sustainable diets is the ecosystem. Indigenous crop varieties and neglected and underutilised species offer particular interesting research. In contexts dominated by industrialised agriculture, the focus may be on how to make a shift towards more nutritious crops as part of eco-service delivery. Farmers in Western Europe for example, are already compensated for ecosystem services. Metrics under development for sustainable diets will have to be tested and validated for both the sustainability aspects of certain products and their nutritional value.
5.	Anticipated level of complexity of the issues to be addressed by the requested action: the issue is highly complex considering the range and breadth of the topic, but the discrete components can be addressed independently or in clusters. For example, a characterisation of an agroecological zone, or traditional/indigenous food system can provide an inventory of unique food species or locally adapted varieties (or local species/breeds of animals), and analyses of the nutrient content of those foods can be undertaken. Detailed methodologies and suites of indicators are available, e.g., from work on the Mediterranean diet as a model for sustainable diets.
6.	Previous work and existing initiatives of a similar nature and evidence of remaining gaps, such as the absence or limited availability of information and tools to address the issues, and reasons why IPBES is best suited to take action: There is a significant body of data, but more and better information is needed on inventories and nutrient composition of food biodiversity from vulnerable ecosystems, characterisation of more agroecological zones for sustainable diets, validation of existing methods/tools/indicators, and development of new methods and metrics.
7.	Availability of scientific literature and expertise for IPBES to undertake the requested action: Since 2010, there is a growing body of scientific literature and scholarly monographs on

	sustainable diets to draw on. Most recent publications include the Sustainable Diets: linking nutrition and food systems (CABI, 2018) and the EAT Lancet Commission report (to be published late 2018).
8.	Scale of the potential impacts and potential beneficiaries of the requested action: Loss of biodiversity is a worldwide urgent problem. It jeopardises all aspects of life, but is particularly relevant to human nutrition. Dietary energy supply can be satisfied with conventional/industrial agriculture, but micronutrient supply requires diversity (i.e., biodiversity).
9.	Requirements for financial and human resources, and potential duration of the requested action: This is not a project proposal, however, members of the IUNS Task Force on Sustainable Diets would be grateful for the opportunity to submit a proposal should funding be available.
10.	An identification of priorities within multiple requests submitted: n/a
11.	Any other relevant information (including a list of any attachments provided): n/a