"How Strong Bamboo Policies can help in achieving UN Sustainable Development Goals"

Date: Monday, 25th January 2021 (07:00 pm - 08:30 pm)

Minutes of the meeting

DST-Centre for Policy Research at Panjab University organized a webinar on "**How Strong Bamboo Policies can help in achieving UN Sustainable Development Goals**". The key speaker for the event was **Ms Sussane Lucas, Executive Director of the World Bamboo Organization**, a horticulturalist, designer and landscape gardener in Plymouth, Massachussets, USA.

The objective of this international webinar was to highlight the role of government policies in utilizing the renewable source bamboo. Also, the 17 UN Sustainable Development Goals (SDGs) were discussed in reference to how bamboo can help in achieving them. More than 60 participants, including researchers, students, policy makers, faculty and staff of Panjab University attended the webinar and shared their suggestions, views, opinions and asked their queries to the speaker.

The opening address was given by Dr. R. Ridhi (Sr. Scientist C, DST-CPR, P.U. Chandigarh) who explained the correlations between Bamboo policies and various paradigm approaches to achieve Sustainable Development Goals in India. She mentioned imperative advantages of bamboo like fast growth, no requirements for re-planting nor fertilizers, pesticides nor any irrigation for its growth and development. Respected Prime Minister Sh. Narendra Modi recognized these outstanding advantages, following which amendments were made in the Indian Forest Act in 2017 to allow its free utilization without any restrictions. This step will allow easy access and effective utilization of bamboo by the community.

Prof. C. Nirmala (Coordinator, DST-CPR, P.U. Chandigarh) welcomed Ms. Sussane Lucas, Prof. R.K. Singla, Dean University Instruction (DUI), the international delegates, and all the participants. She mentioned the key sustainable factors associated with bamboo and its need in today's scenario in attaining the 17 SDGs.

Prof. R.K. Singla (DUI, Panjab University, Chandigarh) thanked the coordinator and the team of DST-CPR for giving him the opportunity to attend this International event. He mentioned that SDGs, global goals, were adopted by the United Nations (UN) in 2015. The UN has defined 12 targets and 7 indicators for SDGs to develop a better sustainable future by 2030. India is a very rich country in natural resources, therefore bamboo will prove to be a beneficial source for replacing the current dependence on renewable sources due to its outstanding applications. He requested Prof. Nirmala and Ms. Sussane Lucas ; the experts of this field, to work more in this domain as it is less explored in the country.

The speaker was introduced by Dr. R. Ridhi. She gave a brief overview of her contributions and achievements. Ms. Susanne Lucas is an Executive Director of the World Bamboo Organization and a horticulturalist, designer and landscape gardener in Plymouth, Massachussets, USA. She has lifetime membership of The American Bamboo Society, in which she has presided from 1994-1997 and also contributed as an editor in the Northeast Chapter newsletter. She owns prestigious membership of the Arnold Arboretum of Harvard University & International Plant Propagators Society. Currently, she is the President of the Horticulture Club of Boston and acknowledged as a life time member of the International Dendrology Society. This Society incubates renowned dendrologists across the world to protect and conserve rare and endangered species worldwide. She has chaired various International Bamboo Congress and workshops in Korea, Antwerp, Portugal and many more.

Ms. Sussane Lucas initiated her talk while explaining the policy and SDGs interdependence. She mentioned that policy comes from the government with a strong background. For example, the Indian Forest Act was amended in 2017 to allow the community to utilize bamboo without any restrictions. The National Bamboo Mission was also initiated by the Government of India which envisages promoting holistic growth of the bamboo sector by adopting area-based,regionally differentiated strategy and to increase the area under bamboo cultivation and marketing. World Bamboo Organization (WBO) became a member of UN Global Compact, the world's largest sustainability initiative. WBO accepted Sustainable Development Goals (SDG's) upholding the aims of the UNGC. SDGs are about finding different aspects in the world that can be changed to have a better world. The 17 SDGs have been mutually recognized among countries around the world working for improving life. Global compact has been adopted by around 193 countries in

2015. These 17 SDGs have emerged with inclusive and comprehensive negotiations among the UN countries. Achieving these SDGs by 2030 requires tremendous efforts. Innovation, accessibility and actions determine the significance and implementation of these goals.

She pictorially demonstrated each SDG and its correlation with bamboo while discussing following points:

(i) **No Poverty:** It is the 1st SDG, which can be achieved if bamboo is made a global commodity. Bamboo can be used to make plywood, furniture, activated charcoal, nutritional food source and many more. Therefore, focus should be there on planting more and more bamboo. It is also the source of livelihood as it can provide employment to many people, especially related to forest. One of the examples of opportunities created by bamboo is producing bamboo charcoal, which can raise funds upto 100 dollars per year

(ii) **Zero Hunger:** On account of its lightweight nature, it can be used in timber, which can generate income sources, which can help in fighting poverty, and providing food security. Also it's shoots are edible, they can be consumed in various forms. Bamboo shoots provide lots of health benefits.

(iii) **Good health and well-being**: Due to its high nutritious value, bamboo may lead to good health and well-being of the community. The shoots are considered as one of the useful health foods because of their rich contents of proteins, carbohydrates, vitamins, fibres, and minerals and very low fat.

(iv) **Quality education**: Teaching benefits of bamboo and how it can act as a substitute for current renewable sources may be beneficial for young researchers to work on this less-explored field. Teaching about it can also be a part of vocational training to people, which can help them in cultivation of bamboo hence earning money.

(v) **Gender equality:** Most of the bamboo farmers are women, which suggests gender equality in terms of the agriculture sector.

(vi) **Clean water and Sanitation:** Due to erosion mediators and activated charcoal, it can act as a water purifier.

(vii) **Affordable and clean energy:** Bamboo charcoal and biomass is a useful source for cooking and heating. 38% of the population rely on biomass for cooking. Bamboo

does not require replanting after harvesting, therefore it will not lead to deforestation, which is currently a problem for other withstanding trees.

(viii) **Decent work and Economic growth:** Bamboos are utilized in traditional craft items. But more value added products have to be made for industrialization and commercialization to achieve this goal.

(ix) **Industry, Innovation and Infrastructure:** This SDG can be met through bamboo as construction and other engineering products using laminated, cross laminated and triple cross products, which can be utilized traditionally and in modern building shelters, houses, scaffolding, bridges and buildings. High strength-to-weight ratio of bamboo allows building constructions which can survive severe earthquakes. A bamboo bicycle is a perfect epitome of innovation and invention.

(x) **Reduced inequalities:** Correlation with bamboo with this SDG is still not clear.

(xi) **Sustainable cities and communities:** Bamboo can be utilized in constructing durable and high strength buildings in earthquake prone areas. Due to its better storage facilities, since the 1980s, engineered bamboos are utilized in modern infrastructures. There is a potential in developing housing, from basic temporary relief shelters to improved housing for social development.

(xii) **Responsible Consumption and Production**: Many traditional products like disposable utensils, tooth brushes, etc. utilizes plastics, which causes pollution. Bamboo can act as a better substitute for them, because it has nature friendly characteristics. Hence bamboo can act as a sustainable source. Similarly, bamboo toilet paper, fabrics & textiles can also be produced from bamboo. They are recyclable and biodegradable which makes them better useful products.

(xiii) **Climate Action**: Bamboo can be a tool for large carbon storage, can be laminated and cross-laminated. Therefore, it can replace a large number of materials with high carbon emissions. Bamboo provides sources, employment and livelihood to around 300 million rural people who depend on forests. 60 % of land in India is used for agriculture and 24 % area is under forest cover. In terms of energy production, it is very important for India to have strong bamboo policies. In terms of climate change, bamboo can help in mitigating CO_2/ Carbon storage, Recycling O_2, Restoration of degraded lands, erosion control and protection of watersheds.

(xiv) **Life below water**: Growing bamboo on land will not directly support aquatic species and conserve water but overfishing, climate change, and pollution can be curbed and can indirectly help in achieving this SDG.

(xv) **Life on land:** Promoting planting bamboo is good for the environment as well as the economy. Many fungal species depend on bamboo for their survival. Bamboo provides shelter, food and habitat for many, from insects, birds, animals and humans. Growing it can prevent deforestation and reduce pressure on existing forest conservers and researchers working on ways to stop the deforestation in an easy way. 21 % of India is under forest cover and globally identified biodiversity hotspots are very good in number. 44 % of the total workforce in India is employed in agriculture and therefore, the forest infrastructure of India needs to be well planned and protected further. Therefore, we need a tremendous global push to plant bamboo. Farmers can invest in its growth because bamboo can be harvested for food, fiber, fuel and timber.

(xvi) **Peace, Justice and Strong institutions**: This SDG aims to significantly reduce all forms of violence, and work with governments and communities to end conflict and insecurity. Bamboo cultivation and hence bringing it to the market in various forms will only be possible if everyone works with the government and communities. This will promote strong institutionalization, which can help people to work together in harmony.

(xvii) **Partnership for the goals**: World Bamboo Congress promotes SDGs while enlightening various countries and communities about the imperative values of bamboo through educational courses, workshops and conferences. September 18 is celebrated as World Bamboo day in the UN Global Compact.

She concluded her talk while summarizing the significance of planting bamboo:

The world needs to plant bamboo to help the planet:

(a) To clean the air, reduce erosion, build soil, to store carbon, and to mitigate adverse effects of climate change.

(b) To provide jobs to reduce poverty

(c) To provide nutritious food to eliminate hunger.

(d) To yield fiber and timber to create sustainable products and sustainable cities

Followed by her talk, Ms. Mamta Bhardwaj (Sr. Scientist C, DST-CPR, P.U. Chandigarh) took the question/answer session from the participants and further discussed SDGs in accordance with Bamboo planted in India and took suggestions from the speaker.

Prof. C. Nirmala gave the concluding remarks and emphasized the role of liberalization policies required for effective utilization of bamboo in India. She mentioned the key features of bamboo which can be implemented in Indian scenario. She thanked the speaker and the participants for their valuable contributions for this webinar.

The session was concluded with a formal vote of thanks by Dr. Mansimran Khokkar (Sr. Scientist D), to all international delegates, the speaker, Prof. C. Nirmala and team for making this enlightening webinar on board.


WEBINAR
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How Strong Bamboo Policies can Help in Achieving UN Sustainable Developmental Goals
DST CPR
SPEAKER
Susanne Lucas
Executive Director
World Bamboo Organization
Massachusetts, USA
Julie L. McIntosh (Guest)
bamboo enthusiast (Guest)
Ravinder Singla (Guest)
Nirmala Chongthani (Guest)
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Prof. R.K. Singla
DUI, PU, CHD

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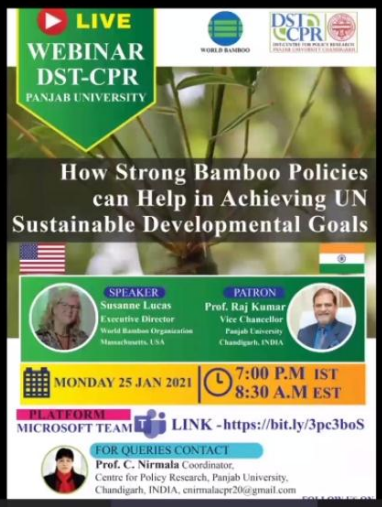
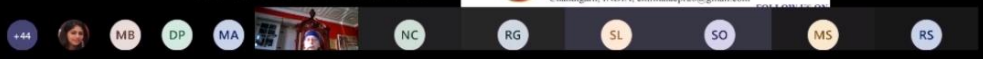
How Strong Bamboo Policies can Help in Achieving UN Sustainable Developmental Goals

Policy?
> a course or principle of action adopted or proposed by a government, party, business, or individual.

or –

- prudent or expedient conduct or action.
- RATHER, LET'S TALK POTENTIALS





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