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Agricultural development within climate change scenarios in West African Small Islands: a challenge for the scientific community

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# Summary

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#### Agriculture

- 1. Climate is a major driver for agriculture determining products and practices at local level
- 2. In past centuries Agricultural R&D, under the pressure of socio-economic changes, has been able to intensify or secure production while climate change was having a limited impact
- 3. This framework has been radically changed, in recent years, by the acceleration of climate change trends in terms of climate variability and extremes events
- 4. Agricultural research has been unprepared to intercept the change and to respond appropriately leaving agricultural systems more vulnerable

# Agricultural R&D between climate change and disasters

- 1. Agricultural R&D on food security has now recognized as a priority adaptation to climate change and disaster prevention
- 2. By this end it has been forced to evolve toward a comprehensive strategy apt to respond to climate and human impacts and to increase rural community resilience
- 3. Agricultural R&D is demanded to provide short and long terms solutions trough technology adaptation et transfer for immediate action and innovative and sustainable agricultural systems for the future years
- 4. Agricultural R&D require years to develop and introduce an innovative technique or product and consequently needs a great capacity to foresee future scenarios

# Agricultural R&D and SIDS community

- 1. SIDS countries exposure to climate change and disaster impacts is not only a limiting factor to development but it is even a survival issue
- 2. SIDS community forms a critical mass to defend the interests of countries that otherwise are marginalized at all level including agricultural R&D
- 3. Furthermore SIDS countries differ radically in terms of factors undermining food security and consequently in agricultural R&D objectives demanding a variety of R&D programs
- 4. Given the present limited resources and scientific appeal for SIDS issues it is urgent to launch an initiative to mobilize the international research community to prevent crisis on the short term and to plan the development on the long term

### Agricultural R&D and West Africa

- 1. Cape Verde is a perfect case in terms of agricultural research challenges
- 2. In early 1990s drip irrigation for horticulture was tested and in few years with a fast growing horticulture sector has been recognized as standard technique. A best practice made possible by a facilitating context and an appropriate technology transfer
- 3. IPCC scenarios show strong divergence in the projections for West Africa length of the rainy season, which makes difficult for agricultural R&D to search appropriate long terms solutions not having a definitive climate reference

### Conclusions

- 1. Agricultural R&D is essential to respond to food security challenges posed to SIDS countries in the context of climate change
- 2. Agricultural R&D for SIDS require the joint efforts of national and international research institutions to reach the necessary critical mass
- 3. Special attention should be given to R&D addressing long term issues even tough impact is not immediately appreciated
- In particular the future climate scenarios should be able to better adapt to the needs of agricultural R&D

# Thank for your attention