



Present myself:

their genetic diversity.

- o Director for Multilateral Science at AAFC
- long career in agricultural biodiversity
- chaired the most recent meeting of FAO CGRFA
- Will confine my comments to Target 13:
 By 2020, the <u>genetic diversity</u> of <u>cultivated plants</u> and <u>farmed and domesticated animals</u> and of <u>wild relatives</u>, including other socioeconomically as well as culturally valuable species, is maintained, and <u>strategies have been developed and implemented</u> for <u>minimizing genetic erosion</u> and <u>safeguarding</u>
- As the working document appropriately points out:
 - this is the only Target that applies at the genetic level
 - o genetic diversity is particularly relevant for food and agriculture
 - unsurprisingly, most of the monitoring, data, tools, policies and guidance are therefore within the realm of genetic resources for food and agriculture (including forest genetic resources) and
 - progress towards this target will be highly dependent upon partners in the food and agriculture field
- I therefore wish to share with you my thoughts and experiences regarding the work done on this
 topic in the Commission on Genetic Resources for Food and Agriculture of the FAO. This Commission
 was established in 1983. As of April 2013, 177 countries and the European Union are Members.
- In my view, ideally the best reading of genetic diversity would be very direct:
 - o in other words, sequencing every DNA molecule of every crop plant and domesticated animal, calculating diversity, and monitoring differences over time
 - unfortunately this is technologically impossible at the present time in spite of impressive progress in developing the tool of genetic sequencing technology
- so the best alternative is to develop a robust proxy and that is what the Commission has done:
 - based on Global Plans of Action for Plant, Animal and Forest Genetic Resources for Food and Agriculture
 - these comprehensive, global and government-approved Action Plans identify priority areas for action
 - the Commission prepared, and FAO adopted:
 - GPA-AnGR in 2007 with 23 strategic priorities
 - GPA-PGR-2 in 2011 with 18 priority activity areas
 - GPA-FoGR in 2013 with 27 strategic priorities
 - o for the first GPA-PGR, in 2004 the Commission adopted a list of 83 core indicators and a reporting format for monitoring the implementation of all 20 priority activities through a country-driven, participatory and capacity-building process, culminating in the establishment of National Information Sharing Mechanisms (NISM) in 73 countries

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- in April of this year, the Commission reviewed proposed sector-specific targets and indicators:
 - it requested FAO to continue developing, testing and applying indicators for biodiversity for food and agriculture at the genetic level, and, whenever relevant, at species and ecosystem levels;
 - o it further requested FAO to strengthen work on targets and indicators in relation to the implementation of the CBD's Strategic Plan for Biodiversity 2011-2020 and monitoring the Aichi Biodiversity Targets;
 - the Commission revised and adopted the indicators for monitoring the implementation of the Second GPA-<u>Plant</u>GR and requested its Secretary to submit these indicators to the CBD CoP as a contribution to the development of indicators for Aichi Target 13. It requested FAO to finalize the Reporting Format for to collect data for monitoring the implementation of the Second GPA by 31 May 2013, based on the revised indicators;
 - the Commission agreed to the use of process and resources indicators and related targets to monitor the implementation and impact of the GPA-<u>Animal</u>GR; and
 - the Commission requested FAO to continue working on a provisional list of indicators to monitor the state of the world's <u>forest</u> genetic resources and the status of implementation of the Global Plan of Action for the Conservation, Sustainable Use and Development of Forest Genetic Resources.
 - in addition, the Commission requested FAO to carry out a thematic study on indicators for the state of genetic resources in <u>fisheries and aquaculture</u>; and
 - it also requested FAO to report on <u>food and nutrition</u> indicators to the Commission at its next session
 - all of this information is available in detail in the Report of the Commission's session, which
 is on-line
- the <u>strength</u> of this approach is the identification and collection of science-based country-based real
 data on a global scale its <u>weakness</u> is the sheer number of indicators, which is admittedly difficult
 to handle in the context of the CBD and the Aichi Targets
- in this regard, in April 2013 the Commission took another important decision:
 - o adopted three targets for plant genetic resources for food and agriculture:
 - sustainable use of PGRFA
 - institutional and human capacities
 - most relevant for Target 13: conservation of PGRFA which states that "by 2020, an increasing proportion of the genetic diversity of cultivated plants and their wild relatives, as well as of wild food plant species is maintained in situ, on farm and ex situ in a complementary manner"
 - the Commission further requested FAO to elaborate <u>higher-order composite indices</u> for each of the plant genetic resources targets, basing them on data collected from the indicators used for monitoring the implementation of the Second GPA
- such higher-order indicators will have the advantages of being:
 - based on real data provided by countries to monitor priority activity areas in crop genetic resources
 - o global in scope
 - synthesized so that they are more easily understood by policy- and decision-makers