PUBLIC SUMMARY
FOOD SECURITY WORKING GROUP
KEY THEMES

Moving forward under a new paradigm

The ongoing coronavirus (COVID-19) worldwide pandemic, although it presents unique challenges in AOS conference planning and organizing and will undoubtedly interrupt this year's field season for many if not all, can also be viewed as an opportunity- a timely pause- and a place to look at what is working and not working and how we could do things differently moving forward. We encourage everyone to use this time as an opportunity to reflect upon and build on our collective relationships, and particularly on relationships with Indigenous communities.

KEY RECOMMENDATIONS

- **View food security through an Indigenous lens;**
- **Weave human health and wellness into every aspect of the observation system;**
- **Support community-driven research and monitoring; and,**
- **Focus capacity building on Indigenous organizations, communities and researchers.**

Although the Food Security Working Group puts forth the four key recommendations above, during our Summit sessions the following themes emerged. We found all of these themes to be exceedingly important and critical to inform discussions beyond the 2020 Summit, thus we provide an expanded table below and urge that the key themes and associated actions be included in summary documents for the Summit.

Key Theme	Description	Recommended Actions
View food security through an Indigenous lens	An Indigenous worldview as a lens to understanding food security includes observations from a variety of ecosystem components from physical to biological to cultural and health and wellness. Indigenous Peoples have different perspectives of what an 'ecosystem approach' is than what is being typically applied. Inclusive of diverse perspectives in a community in order to get a whole picture, for example often researchers seek out expert Indigenous or Traditional Knowledge holders or active hunters; but exclude other expertise and groups (e.g., youth, those processing foods). An understanding of the Indigenous governance landscape and flow of information (formal or informal) is needed and can be achieved by viewing food security through an Indigenous lens.	● Adopt the "Six Dimensions of Food Security Framework" (ICC-Alaska 2015; ICC-Alaska white paper submissions to AOS). ● Facilitate Indigenous participation in the ROADS process. ● Ask Indigenous participants to set focal observation variables. ● Co-design a system that is flexible and adaptable and incorporate a variety of programs/ methodologies/approaches. ● Address issue of access to the system by both Indigenous Peoples and researchers.
Weave human health & wellness into every aspect of the observation system	There is a fundamental need to fully understand what Indigenous Peoples mean by health and wellness, particularly in regards to our relationships that are taught through a belief and value system that we are not separate from. Indigenous perspectives take a holistic approach about what ecosystem health means in relation to serious threats of pollution (e.g., contaminants, plastics), human and animal diseases, mental wellness, and degradation of the overall ecosystem. Current external management systems continue to have detrimental impacts on Indigenous health and wellness.	● Facilitate Indigenous leadership through capacity-building (see Key Theme). ● Include an 'Impacts on Human Health and Wellness' session/track at the next AOS and invite Indigenous scholars to lead the conversation. ● Provide co-produced training and resources for researchers to gain a better understanding of the Indigenous health and wellness implications of their research. ● Encourage regular and meaningful communication with regional efforts (e.g., One Health, ArcticNet, etc.).

Support community-driven research and monitoring	Indigenous Peoples prefer community-*driven* monitoring over 'community *based* monitoring (CBM)'. Community-driven efforts are limited because funding does not support long-term data collection efforts. There is an immediate need to support ongoing and expanded community-driven efforts across the Arctic which facilitate individuals to observe and monitor on the ground, year-round, as opposed to work only by seasonal external researchers. Abundant financial resources are needed for building collaborative approaches on a large scale.	● Rename the *Community-Based Monitoring Atlas* to *Community-Driven Monitoring Atlas* and update project list. ● Increase funding to existing and new or expanded community-driven programs. ● Fund Indigenous organizations to develop community-defined protocols for what community-driven research is and how to be a good partner to Indigenous communities.
Adopt a food sovereignty approach to governance	There are limited to non-existent co-management frameworks in some Arctic countries; we need to advance co-management structures where they are non-existent and facilitate equitable co-management across the Arctic. Indigenous Peoples across the Arctic need facilitated convening opportunities to learn and share with one another. Regularly applying the food security conceptual framework in decision-making; systematically identifying impacts of regulations and policies on Indnigenous ways of life and health of the ecosystem; identify examples of bringing together Indigenous and Traditional Knowledge and science for decision making; Indigenous communities are facing common challenges but under different dominant governments resulting in different impacts.	● Implement recommendations from the ICC-Alaska Food Security and Food Sovereignty workshop (submitted white papers & available online) and in the forthcoming Food Security Working Group Synthesis. ● Include multiple Indigenous Peoples (expert knowledge holders, scholars, organizations) in every expert panel. ● In the SAON ROADS framework, include transparent and consistent pathways to show how and where observation data are used in decision-making.
Appropriately acknowledge & value Indigenous Peoples' Knowledge*	Indigenous Peoples' knowledge is not taken seriously nor weighed equally with other types of scientific data and information. Western institutions, as a whole, must make abundant resources available to meet and engage with Indigenous Peoples' knowledge. Most western research, including proposal development, continues to move forward without Indigenous Peoples' knowledge as the status quo. Indigenous Peoples' knowledge is not only 'data', but also the framework for how to look at, understand, and think about our world. Researchers, agencies, and institutions must shift the way they do their work to embrace and prioritize Indigenous Peoples' knowledge. This includes	● Co-produce guidance that supports relationship-building between researchers and remote Arctic communities as critical to facilitating better working relationships. ● Encourage funding institutions to reframe how proposals are ranked in a way that prioritizes projects with ample budget for time spent in communities and/or funding for Indigenous partners.

	leaving titles and egos at the door; trusting and respecting Indigenous Peoples' knowledge as valid, and recognizing them as equitable to western science.	● Adopt guidance from Indigenous communities to define what kind of funds are 'adequate' and what is needed for Indigenous involvement in successful research and monitoring.
Appropriately acknowledge & value Indigenous languages	Language holds knowledge. Researchers must learn to respect and work among Indigenous languages. Dominant scientific languages reinforce linear thinking; Indigenous languages encompass holistic, interconnected worldviews. Researchers must be encouraged and funded to develop a deeper understanding of the cultures they work in and with. This is best achieved through long-term relationship building and time spent in and with communities. Research questions, research design and research activities must be designed to capture these nuances in language and understanding, and must be structured to allow the time and space for such understandings to come to light and be expressed.	● Provide funding under exploratory work for researchers interested in learning an Indigenous language ● Offer regional opportunities for researchers and Indigenous Peoples to come together in workshops to develop shared understandings and explore areas of similar interest.
Use a common language & understanding in the ROADS process	People from different perspectives, backgrounds and training hold various understanding of concepts and terms commonly used when discussing observing systems. Several examples include "community," "ecosystem," "ecosystem-based," and "community-based." We need to collectively think about using a common terminology and language moving forward.	● Co-produce a common terminology and language guide for the ROADS process.
Increase support for capacity building for researchers	Capacity building is needed for researchers at all career stages and at all types of institutions (academia, governmental and non-governmental agencies). Some examples include the need for a thorough and comprehensive understanding of Indigenous languages, cultures, and values, as well as Indigenous governance systems, communication, and education. It is okay to make mistakes and to ask for advice (while recognizing the burdens this may place on Indigenous people and organizations).	● Provide training and resources to researchers to gain a better understanding of Indigenous languages, cultures, values, governance systems, communication, and education.

Increase support for capacity building for Indigenous Peoples & communities	Empower and include Indigenous leadership and Indigenous and Traditional Knowledge holders to inform critical observing needs as an integral part and prerequisite of all of the stages of ROADS; capacity building is not just about funding capacity; serious issue that limits engagement and true partnership with Indigenous peoples; still remains a serious limitation to fully realizing co-production of knowledge and Indigenous leadership in research today	● Provide funding directly to Indigenous organizations and communities to: ○ develop their own protocols ○ develop their own critical observing needs ○ engage in co-production of knowledge and develop Indigenous leadership in research and monitoring ○ involve youth in observing and research projects. ○ train and engage youth for long-term participation in observing and research.
Appropriately acknowledge the contributions of Indigenous Peoples & organizations	There is a need to appropriately acknowledge contributions of Indigenous peoples and organizations. This includes when these sources are used in published work, oral and poster presentations, visuals (e.g., ICC-Alaska 6 Dimensions of Food Security Framework) - all should be properly cited in the same manner as western peer-reviewed data and publications. Current funding processes should incorporate aspects in a true co-production of knowledge approach (white paper).	● Provide funding directly to Indigenous organizations and communities to develop their own protocols and ethics guidelines. ● Provide Indigenous-led co-production of knowledge approach training for researchers that is developed by Indigenous perspectives and values.
Document & share good examples of research practices from Indigenous experiences	Indigenous Peoples have been observing our environments under a food security lens for millennia. This knowledge is shown in practice, by observation programs and research projects led by Indigenous Peoples and organizations, and not necessarily accessible to academics. There is a need to document and share these examples and to use this information to help connect people both research and Indigenous communities to foster partnerships across the circumpolar Arctic. Some resources identified at AOS2020 include SciQ; Indigenous Sentinels Network; and stories in the FSWG Synthesis that highlight the many interconnected dimensions of food security and a co-production of knowledge approach.	● IASC should support cross-pollination networking opportunities that include Indigenous Peoples and researchers in meaningful ways across the Arctic. ● IASC should support the continued work of the Food Security Working Group. ● Food Security Working Group should be charged with regularly communicating (in person, email list serve, etc.) with the Indigenous observing community to identify and share best practices with the broader Arctic observing community.

*A note on terminology

Indigenous Peoples' Knowledge: The FSWG has purposefully used the term 'Indigenous Peoples' knowledge' in our documents. It is important to recognize the diversity of Indigenous cultures across the Arctic and to understand that each of those cultures, regions, and even communities, have their own specific bodies of knowledge. There are also a variety of terms and concepts related to knowledge in use by Indigenous communities and organizations. The use of 'Indigenous Knowledge' or 'Traditional Knowledge', and how they are defined, is not uniform across the Arctic. It is important to follow the lead of the community(ies) you are collaborating with to determine which concept, term, and definition is appropriate for any given project or context.