SOLUTIONS FROM THE LAND

Invasive Alien Species Work Program

Problem Statement

The unprecedented introduction and spread of invasive alien species (IAS) throughout our planet is accelerating at such an alarming rate as to rank as one of the most urgent threats to humanity and the life systems and resources we depend on according to the IPBES 2023 Assessment Report[1]. Alien species are classified as "invasive" when they have a harmful effect on the economy, environment, and/or health. [2] The consequences of ignorance, forgetfulness and policy negligence in addressing the needed infrastructure to prevent, exclude, detect and eradicate invasive and opportunistic species have left our world vulnerable and predictably threatened. At any given time, serious outbreaks and infestations occur in countless locations, across habitats and multiple dimensions of life systems. Introductions of invasives can be inadvertent (hitchhikers), weather driven (hurricane winds), accidental, intentional (commercial), illegal (bio-smugglers) and terrorism driven (of particular recent concern). Individually they can appear to be localized and hopefully contained, but collectively, they represent a conflagration of barely controllable incidents of negative impact and catastrophic potential.

The tragic experiences of humanity over millennia should give us good wisdom and informed instruction on how to build protective infrastructure and response mechanisms as we prepare for predictably unpredictable plagues, droughts, famines, wars and collapse of systems that affect our capacity to sustain populations. Unfortunately, significant vulnerability continues to exist throughout our 21st Century world as natural events, political upheaval and poor policy decisions negatively impact regions and continents. As global populations continue to grow, the never-ending task for humanity will be to continue to produce and maintain a reliable and abundant supply of food, feed, fiber, energy and water…if it can be protected.

The roles of Agriculture and the multiple dimensions of life systems management and resource utilization translates to the simple conclusion that there is no "one size fits all" solution to fulfilling the nutritional and material needs of over 8 billion human inhabitants and their domesticated animals. Rather, **an all systems approach with an inclusive, working landscape strategy, utilizing a full "toolbox" array of ancient knowledge, current and new age technologies** would

[1] IPBES (2023). Summary for Policymakers of the Thematic Assessment Report on Invasive Alien Species and their Control of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Roy, H. E., Pauchard, A., Stoett, P., Renard Truong, T., Bacher, S., Galil, B. S., Hulme, P. E., Ikeda, T., Sankaran, K. V., McGeoch, M. A., Meyerson, L. A., Nuñez, M. A., Ordonez, A., Rahlao, S. J., Schwindt, E., Seebens, H., Sheppard, A. W., and Vandvik, V. (eds.). IPBES secretariat, Bonn, Germany. https://doi.org/10.5281/zenodo.7430692

[2] IUCN (International Union for Conservation of Nature), the World Trade Organization, and the Convention on Biological Diversity. Pysek et al. 2020. Scientists' warning on invasive alien species. Biological Reviews 95:1511-1534.

deliver the best framework for a thriving agricultural sector that ensures human health, economic well-being and ecosystems in balance. Concomitant with that existing 'framework' should be a robust and comprehensive phytosanitary barrier that focuses on prevention, exclusion, detection, diagnostics, delimitation, mitigation and eradication planning. That same 'toolbox' mentality to defend against invasive species needs to be constantly upgraded, improved and strategically managed in order to build resilience. Plagues, pestilence, famines, outbreaks, epidemics, pandemics and quarantines are the old and new, after-the-fact words we use when we forget our lessons of the past and present. Successful agriculture depends upon our determined vigilance and commitment to invest in those areas that deliver more predictability for a positive harvest outcome.

THE IPBES report found that invasive alien species and their negative impacts can be prevented and mitigated through effective management. The report authors also called for expanded cooperative and coordinated response efforts and more effective management and integrated governance approaches to addressing these challenges. This work plan represents a critical call to action and elevates the voices of farmers, ranchers, foresters and fishers in support of desired outcomes.

SfL Invasive Alien Species Work Program 2025-2028

In response to this major and growing global challenge, SfL is working to facilitate the formation and support of an effective functioning **multi-stakeholder, cross boundary coalition** that will work nationally and globally to elevate awareness of invasive alien species challenges and support cooperative and coordinated efforts to prevent and mitigate their impacts through more effective management and integrated governance approaches.

Our plan is to utilize a "co-creation" model to build the invasive alien species coalition. Under this approach, participating partners would create a "guiding group" that will develop a three-year work program focused on cross boundary knowledge sharing, enabling policies and programs and advocacy work. The guiding group will be comprised of agricultural organizations, farmer representatives and agrifood value chain, academic and government collaborating partners.

<u>Phase One</u>- Construct an IAS action plan and recruit funding partners <u>(2025/2026)</u>

Objectives

- Elevate awareness and understanding of IAS challenges
- Secure commitments to join and resource a multistakeholder coalition/alliance that will proactively work to expand, accelerate and improve and better integrate IAS mitigation and control efforts

Key Tasks

1. Fundraise to support Phase one activities (Summer '25)

2. Ground truth and build on current efforts to address challenges (Fall '25)

3. Hold introductory meetings with primary partners to explore interest/willingness to collaborate with SfL in responding to this growing crisis. (Fall '25)

4. Assuming positive response:
    a. Develop Terms of Reference for the IAS alliance (Fall'25)
    b. Facilitate the formation and support the effective functioning of a multi-stakeholder, cross boundary coalition/alliance that will work nationally and globally to:
        i. elevate awareness of invasive alien species challenges; (Winter '26)
        ii. develop a three-year work program focused on cross boundary knowledge sharing, enabling policies and programs and advocacy work (Winter/Spring '26)
        iii. fundraise to support implementation.
    c. Launch Phase Two (implementation) -support national and global efforts to prevent and mitigate their impacts through effective management and integrated governance approach to biological invasions. (Spring '26 and beyond)

Phase One Budget

- Facilitation/management services	$35,000
- Administrative Support	9,000
- Travel (domestic and international)	20,000
Direct expenses	$64,000
Indirect expenses @ 20% of direct	13,000
Total	$77,000

About SfL: Solutions from the Land is a farmer-scientist led nonprofit corporation with extensive experience facilitating land-based, working landscape solutions to global challenges. SfL, as an UN accredited organization has effectively engaged the UNFCCC, FAO and UNEP for over a decade with many of its recommendations incorporated into both policy development process and substance. SfL has been a key player in the construct of the Sharm el-Sheikh Joint Work on Agriculture: the first ever global effort to mainstream agriculture into the UNFCCC processes and drive transformation in agricultural and food systems, addressing the synergies and trade-offs between adaptation, mitigation and productivity. SfL's network of farmer leaders and cooperating government, academic, business and conservation partner leaders are successfully demonstrating how to sustain a thriving agricultural sector that accelerates progress and builds resilience through innovative collaborations.

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