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GESI integration activity for SERVIR technical teams Part 2

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This slide deck is associated with a series of training materials developed by the SERVIR Science Coordination office to support Gender Equity and Social Inclusion into Applied Earth Sciences. Materials are available at the SERVIR / GESI-eo-training GitHub repository (link)

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GESI integration activity for SERVIR technical teams Part 2

Objectives:

1. to introduce technical teams to GESI-lens considerations within their service area
2. to help technical teams team members determine key issues and relevant steps for building more inclusive services
3. to illustrate how findings from a gender analysis (or similar effort) will inform geospatial service design

Gender Analysis Domains

1. Rights	Legal and customary	Laws and policies, formal and informal, at various scales
2. Environment	Stressors and vulnerability	Climate-related information
3. Representation	Participation, inclusion and power	Local decision-making impacts
4. Practice	Attitudes, customs and beliefs	Consider cultural norms that may be harmful to some groups
5. Roles and Responsibilities	Division of time, space and labor	Paid and unpaid labor, informal roles, etc.
6. Resources	Access to and control over assets and services	Understanding differentiated reliance on various resources as they relate to #5

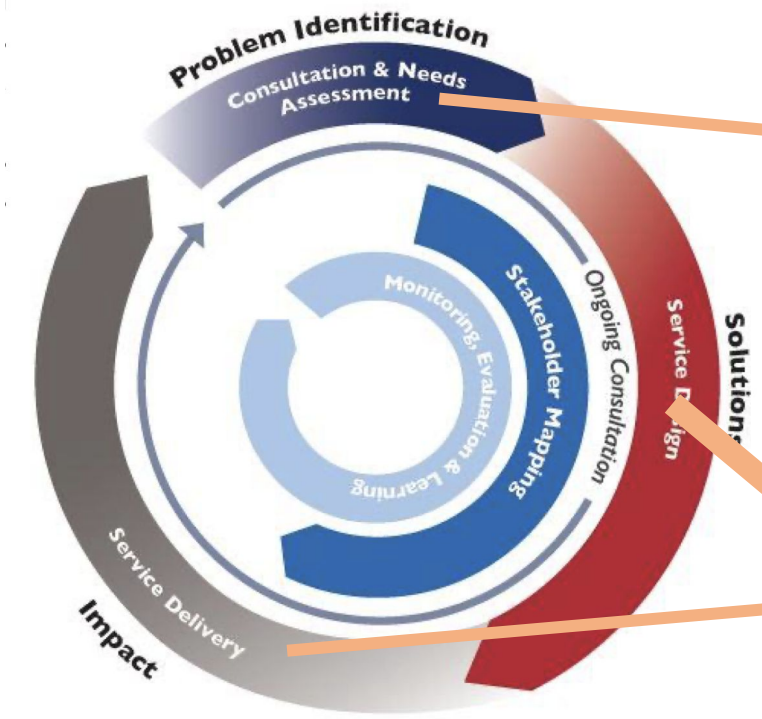
Activity Description

The following slides provide hypothetical examples of gender analysis findings relevant to applied geospatial services. These findings are based in truth, but full gender analyses for each example have not occured, therefore, the “findings” used here are to provide teams with sample tangible gender analysis outcomes to brainstorm service design challenges in a variety of thematic areas. The full agriculture and food security example is provided. Additional templet prompts are provided where teams can fill in service design considerations themselves.

Agriculture and Food Security

Women often have fewer land rights, and therefore may not have the same access to credit (which usually requires land as collateral), ag inputs (extension services, fertilizer, seeds), legal protections, and decision-making abilities. Desirable or more productive land is typically reserved for male farming activities. As a coping mechanism, women may still try farm on degraded lands.

Example of potential service significance:
There is growing appetite globally for satellite-based agricultural insurance products. However, if women do not hold land titles, they will be limited in their ability to take up crop insurance.



Actions:
- hold women's group consultations to understand ***customary*** and ***legal*** rights of women in the target user and beneficiary groups
- Assess whether the findings impact service delivery and design. If they do, a full-scale **Gender Analysis** is recommended.

Action: integrate findings and recommendations of consultations and/or Gender Analysis into **service design** and **delivery**

RIGHTS: legal and customary

General awareness of legal frameworks and customs in a service region is important both for service design and service implementation

Agriculture and Food Security

Hypothetical-ish GA Findings & Sex Disaggregated Data Collection:

- Women intercrop a wide variety of things including horticultural products for household use, while men focus on monocultures for market
- Women's farmland is heavily degraded
- Women rarely have access to fertilizer, do not have time to weed or tend to crops in between critical periods
- Any heavy machinery use (plows, livestock, etc) women may use, but only after the men have finished
- Women receive little climate service information, but do have key environmental signals (animal behaviors) to tell them when to plant
- Women use plastic water bottles as drip irrigation systems; due to the larger farm scale, this method is inaccessible to men's fields
- Women lose more of their harvest to rot due to the inability to harvest in time, and the lack of access to storage facilities

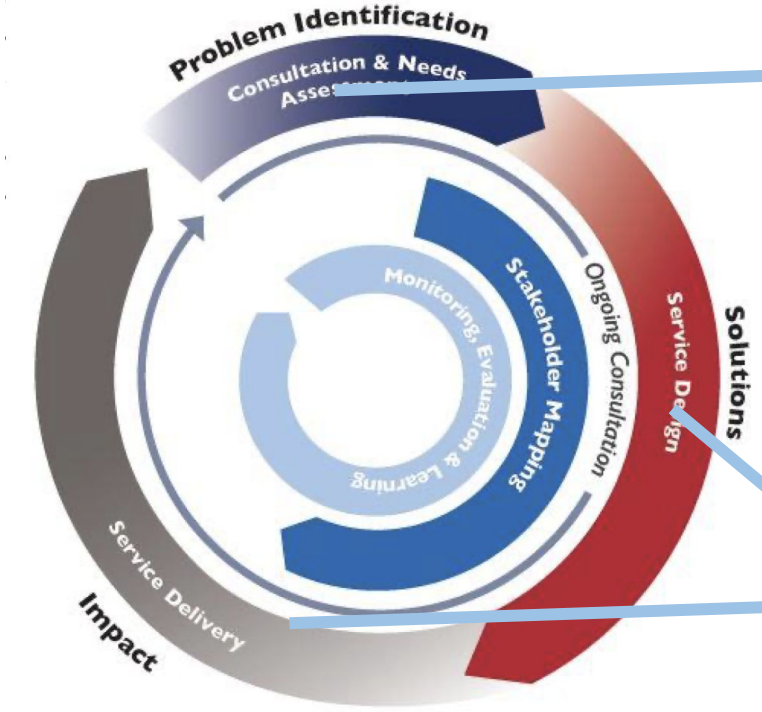
Key Geospatial Service Design Considerations:

- What ground data do we need?
- What additional datasets could we consider providing?
- What crops should we focus on?
- How should we paramaterize yield models?
    - How do these factors influence cal/val of the models?
    - What is the relationship between the yield of one crop compared to others under the same conditions?
- What drought thresholds are important for these crops and communities? How does the timing of the drought impact different crops?
- How accurate are traditional environmental signals and can/should they be used in the service?

Water Security

Customs and beliefs can have significant impact on water security for women; for instance, issues of hygiene, absence of women-specific hygiene facilities, menstruation-specific customs (such as menstrual huts) and the exclusion of girls from education can both augment women's water needs and marginalize them socially. Understanding social norms around water use can create pathways for more inclusive stakeholder engagement.

Example of potential service significance: Opportunities for gender-responsive services that recognize women's specific needs and vulnerabilities, engage women as champions, and collaborate with other programs (for example, WASH) that engage with water and sanitation.



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PRACTICE: attitudes, customs and beliefs

Understanding attitudes, customs, and beliefs supports efforts to respect local customs, helping build trust with stakeholders and ground approaches within the local context, ensuring impact and sustainability.

Water Security

Hypothetical-ish GA Findings & Sex Disaggregated Data Collection:

- The only facilities for people to evacuate to are mixed gender and without any substantial WASH facilities
- Women must be escorted by a male family member in order to go out in public
- Due to their roles associated with domestic responsibilities, in the case of a flood, women will remain at home with the children and elderly
- Flood warnings are delivered in the national language on TV, TVs are usually only available in central gathering places, where women typically do not frequent.
- Women do use animal and bird behavior to predict storm occurrence and severity
- Sex disaggregated data on perceptions of flooding and actions people consider taking with various amounts of lead time are on the way. Current evidence suggests that if families had at least 5 days notice, and the storm was above a severity threshold, they might all evacuate

Key Geospatial Service Design Considerations:

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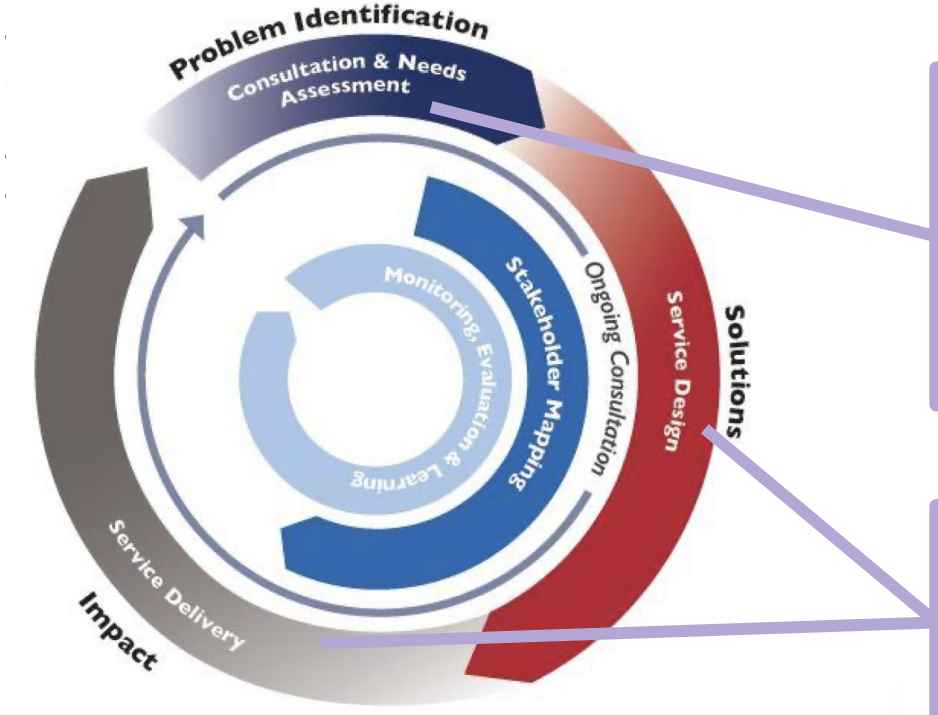
Weather and Climate Resilience

Seasonal and sub-seasonal forecasting can influence what crop or variety a farmer may choose to plant that year. However, women's labor and resource constraints can lead them to plant, weed, and harvest much later in the season than men, which leads to lesser yields. Women and men also grow different crops, and keep different livestock, such as chickens, rather than the cattle more typical of men.

Example of potential service significance: Seasonal onset data, length of season and likely amount and timing of precipitation may not be useful to women unless their specific priorities and constraints are captured. Forecasts of extreme weather should be relevant to all livestock categories, including ones traditionally kept by women.



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ROLES AND RESPONSIBILITIES: division of time, space and labor

Understanding the gendered dynamics behind different kinds of labor and leisure activities, access to spaces, information, or technology can help a SERVIR service team identify better avenues for communication, engagement, and equitable impacts.

Weather and Climate Resilience

Hypothetical-ish GA Findings & Sex Disaggregated Data Collection:

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- Any heavy machinery use (plows, livestock, etc) women may use, but only after the men have finished
- Women receive little climate service information, but do have key environmental signals (animal behaviors) to tell them when to plant.
    - Women are more likely to use climate information services compared to men, who are more likely to do what they have always done
- Women use plastic water bottles as drip irrigation systems; due to the larger farm scale, this method is inaccessible to men's fields
- Women lose more of their harvest to rot due to the inability to harvest in time, and the lack of access to storage facilities
- If the seasonal forecast is particularly dire, fathers consider marrying off their daughters to have access to the dowry, also they can get a better dowry in resource rich times, than lean ones.

Key Geospatial Service Design Considerations:

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