

## Tip Sheet

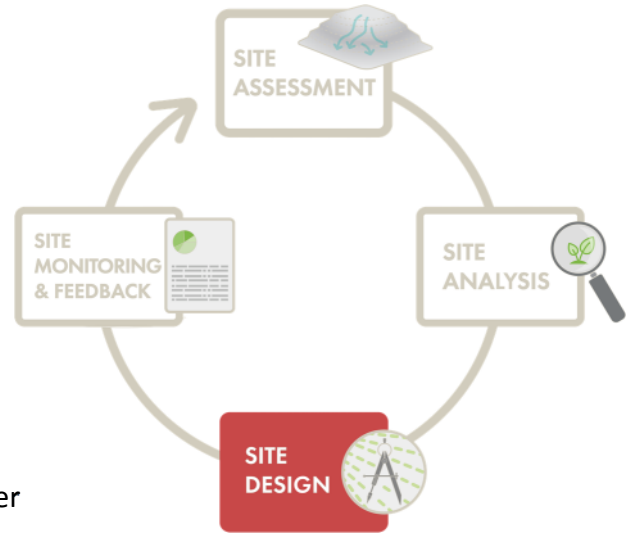
### Step 3: Site Design

**Aim:** Use information and critical thinking from the previous two steps, together with ten principles as guiding questions, to design a site that optimizes resources and influences for a more resilient farming system.

**Key Takeaway:** Having a whole site design helps a farmer leverage relationships between different resources and influences to increase production and resilience to environmental, economic, and social shocks and stresses.

**Summary of Step 3 in Practice:** Following the identification and analysis of the existing resources and influences (in the site assessment and site analysis), the next step is to incorporate that information into a site design to better organize and implement the farm system. After that, it's time to translate the design into action.

Encourage farmers to start small and simple, and to consciously integrate techniques together over time, so that they can observe changes and adapt their system slowly while limiting risk.



#### 1. Familiarize yourself with the 10 Resilience Design Principles.



#### 2. Plan the site using information from the site assessment and analysis.

- **Resource Planning** – what crops, livestock, plants and other resources should be utilized or integrated into the farm based on the site-specific conditions and locally available inputs?
- **Energy Efficiency Planning**– how can you situate resources in the farm based on the attention they need and the amount of energy they require?
- **External Influence Planning** – how can you situate resources in the farm to block or diffuse the effect of negative influences (like hot wind, harsh sun, floods) and channel, capture, and utilize positive ones (like winter sun, storm water or runoff for irrigation)?
- **Slope Planning** – how can you situate resources in the farm to maximize use of gravity (nutrients and water flowing down)?

# RESILIENCE DESIGN IN SMALLHOLDER FARMING SYSTEMS



## 3. Review the placement of resources within the context of economic, social and gender influences using information collected from the site analyses.

- Economic – have you incorporated any resources with high market demand? Can you grow any resources that are expensive to buy or unreliable in the market?
- Social – consider cultural norms and laws. Are there any placed resources that disrupt social norms?
- Gender – consider gender divisions of labor and control of resources. Have you placed resources managed by one gender near one another to conserve labor (e.g., chicken pen and vegetable garden, if both tended by the female)? Are there any safety considerations affecting one gender or the other?



## 4. Select and combine agricultural techniques to incorporate into the design.

- Soil: What soil building techniques can you use based on slope, energy efficiency, etc.? How can multiple techniques work together?
- Water: What water management techniques can you use? Remember to slow, spread, and sink the rain and runoff water!
- Increased Production: What techniques will increase crop and livestock production?



## 5. Review the plan through the principle application.

- Go through the principles as guiding questions while looking at the map.
- Should anything be moved?



## 6. Work with the farmer or community to implement the design.

- Start small and simple.
- Use the A-Frame (as needed) to identify the contour of the land.
- Integrate resources and techniques as possible and able.