

Fact sheet

Crop-Livestock Integrated Models on SLM:

Introducing SLM for protecting water resources, building soil and promoting organic fertilizer use.

Dairy is a promising livelihood among the farmers in the central highlands of the country. Proper housing for animals and good dairy practices are missing among the small scale dairy farmers. The farmers do not consider housing as major requirement for the animals. Unprotected farm waste disposal leads to add them into the water streams and water pollution. Composting is the best tool for preventing this and protecting water quality, and it also provides higher value product to the farmers. Demonstration on permanent housing, composting system and effluent disposal are key activities in promoting SLM; protecting water resources, building soil and promoting organic fertilizer use.

Objectives of the demonstration models

1. Demonstrate crop livestock integrated management system for sustainable land management
2. Showcase the proper waste management mechanism for dairy sector and thereby reduce water pollution.
3. Demonstrate the private public partnership for sustainable land management and economically viable production system.

The activity will be implemented as an integrated approach with government and private sector participation. Overall coordination will be done in the divisional agricultural committee headed by divisional secretary.

Partner agency	Role
<i>Department of Animal Production and Health (DAPH)</i>	<ul style="list-style-type: none">• Mandatory government institute that providing technical leadership to the livestock industry and its stakeholders
<i>Department of Agriculture (DOA)</i>	<ul style="list-style-type: none">• Provide technical know-how on crop production, soil conservation and compost production
<i>Department of Export Agriculture (DEA)</i>	<ul style="list-style-type: none">• Provide technical know-how on spice production
<i>Tea Small Holding Authority (TSHDA)</i>	<ul style="list-style-type: none">• Provide technical know-how on tea cultivation
<i>Bio-Foods: A private company engage biodynamic, organic and fair-trade agriculture. They export organic tea, spices and coconut products</i>	<ul style="list-style-type: none">• Purchase organic produce from the farmer such as tea and spices. Link their organic farmers with the dairy farmers to promote compost use and support dairy farmers to earn additional income from compost.
<i>Fonterra: A milk collecting company that collects milk from the dairy farmers in the project area.</i>	<ul style="list-style-type: none">• Field coordination and dairy products marketing



Figure 1: Poor housing; no proper method to farm waste disposal



Figure 2: Open disposal of farm waste at Pambadeniya – Doluwa; leads to downstream water contamination continuously.



Figure 3: The open disposal of farm waste at Naranhinna – Deltota; poor attention and awareness

Table 1: Implemented crop-dairy demonstration models

Location District	Divisional Secretary Division	Micro Catchment	Number of demonstrations completed
Kandy	Deltota	Naranhinna	01
Kandy	Doluwa	Gurukele and Pambadeniya	04
Badulla	Perawella	Sapugasulpotha and Dambugasagla	06

Project intervention:

4-cow unit: LKR 70,000

Compost shed: LKR 35,000

Effluent management LKR: 12,750

Cost of soil conservation: LKR maximum

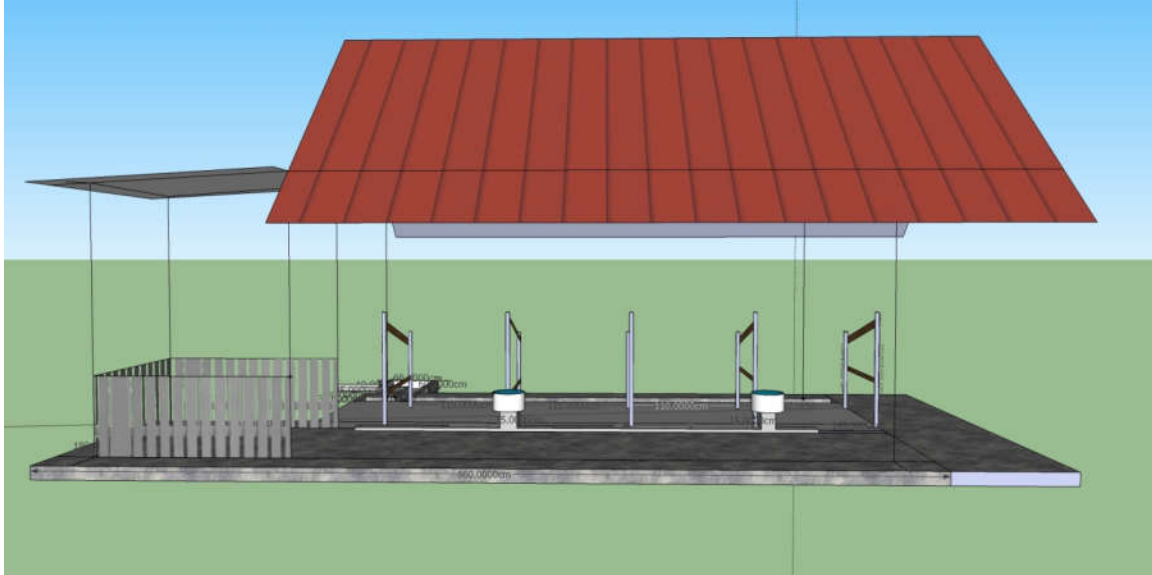


Figure 4: Four cow unit drawing



Figure 5: Compost shed design

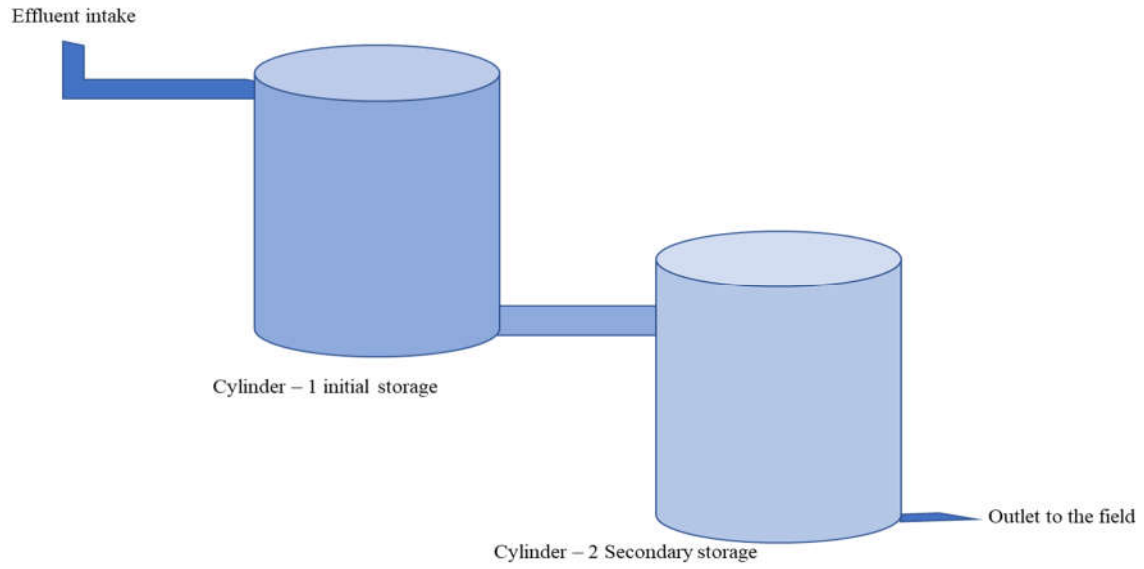


Figure 6: Effluent discharge system



Figure 7: Veterinary officers inspect the house construction

PRESENT SITUATION



Figure 8: SLM techniques: hedgerow, CO3 grass, compost



Figure 9: Gliricidia hedgerow with CO3 grass



Figure 10: Compost shed



Figure 11: Proper housing for the animals