Presentation on Drip Irrigation System

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Background

- Water demand of Kathmandu and its sources
- What is drip irrigation
- Why Baneshwor
Goal and Objectives

- To determine the feasibility of adopting drip irrigation system in the urban areas where water supply has always been a major problem.

- To preserve the plants that have been planted by the government as an investment to the infrastructure of the city while ensuring protection from city problems like prolonged dry spells.

- To maintain aesthetic value by sustaining the greenery in a crowded city.
Current Scenario of Islands
Project site tour
Rationale and Benefits

- Efficiency
- Ensure adequate moisture
- Time efficiency
- Saves the cost of the fuel
- Control erosion of soil
- Easily customizable
- First time in urban city
- Feasibility of Partnership approach
Action Plan

**Phase 1:**
- Consultation with experts (complete)
- Meeting with governmental authorities (Progressive)
- Field measurement (complete)

**Phase 2:**
- Reconnaissance Survey (left)
- Consent acquirement (Progressive)
- Paper work (Progressive)
Phase 3:
- Installation

Phase 4:
- Monitoring and evaluation
Methodologies

- Consultation
  - Experts: Agricultural, Drip irrigation, Ecologist

- Reconnaissance survey
  - Target stakeholders: nearby proximate entrepreneurship
  - Aim to study the potentiality of adopting CSR
  - Report will be prepared

- Paper work
  - Necessary paper for the project will be acquired
  - Proper documents will be maintained
Installation
- G7 agriculture, Nepal, will assist technically during installation
- Report will be generated

Monitoring and Evaluation
- Agricultural and Drip Irrigation expert will be visiting the field quarterly
- Report will be generated
Irrigation plant working mechanism

- Water collection
- Water passage through screen filter
- Pressurized pump maintain the necessary pressure
- Water flows into system through 50 mm PVC pipe
- Division of PVC into two lines
Line one – for Plants Irrigation with system called online dripper system

- For each Island 3 different sub-lines (16 mm Plain Lateral) are started from PVC
- 3 sub-lines goes up to end of the Islands A, B and C accordingly
- These pipes will be covered by soil
- Now from sub-line, micro tube is connected and at the end of micro tube Online dripper is connected (4 lph or 8 lph) (lph: Liter per hour)
Line two - for Green Grass Irrigation

- It’s called pop-up system
- Up to end of each Island 50mm PVC pipeline is passed
- Then from PVC, (each 2-3 meter distance) new sub lines are started using online lateral
- Then pop-up is connected in each sub lines
- Pop up rest on land with customized diameter
Limitations

- Issue of aesthetic beauty
- Permission acquiring may take time delaying an implementation date
- Traffic constraint during construction
Vote of Thanks

- Mentor, Dr. Shanta Raj Jnawali
- TGG facilitator, Sikha didi and associated partners of TGG
- Judges
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- Kabita didi for coordinating
- Classmates
- Hall Provider
Any Queries, ?