

Introduction of Wetlands for Sustainable Environment Management

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Outline

- Background/ Rationale
- Goal/ Objectives
- Methodology
- Outputs/Outcomes
- Budget
- Sustainability
- M&E
- Conclusion

Background

- Nepal , Kathmandu
- 395 sq km
- Population- 2.5 million -WB
- Haphazard urbanization
- Demolition and construction
- Massive tree destruction
- Flooding of roads

Flooded Roads



Climatic Feature

80% of rainfall- June to August

Goal

To create green-zones in order to minimize environmental degradation

General Objectives

- Improve water management
- Reduce air pollution - introduction of wetlands

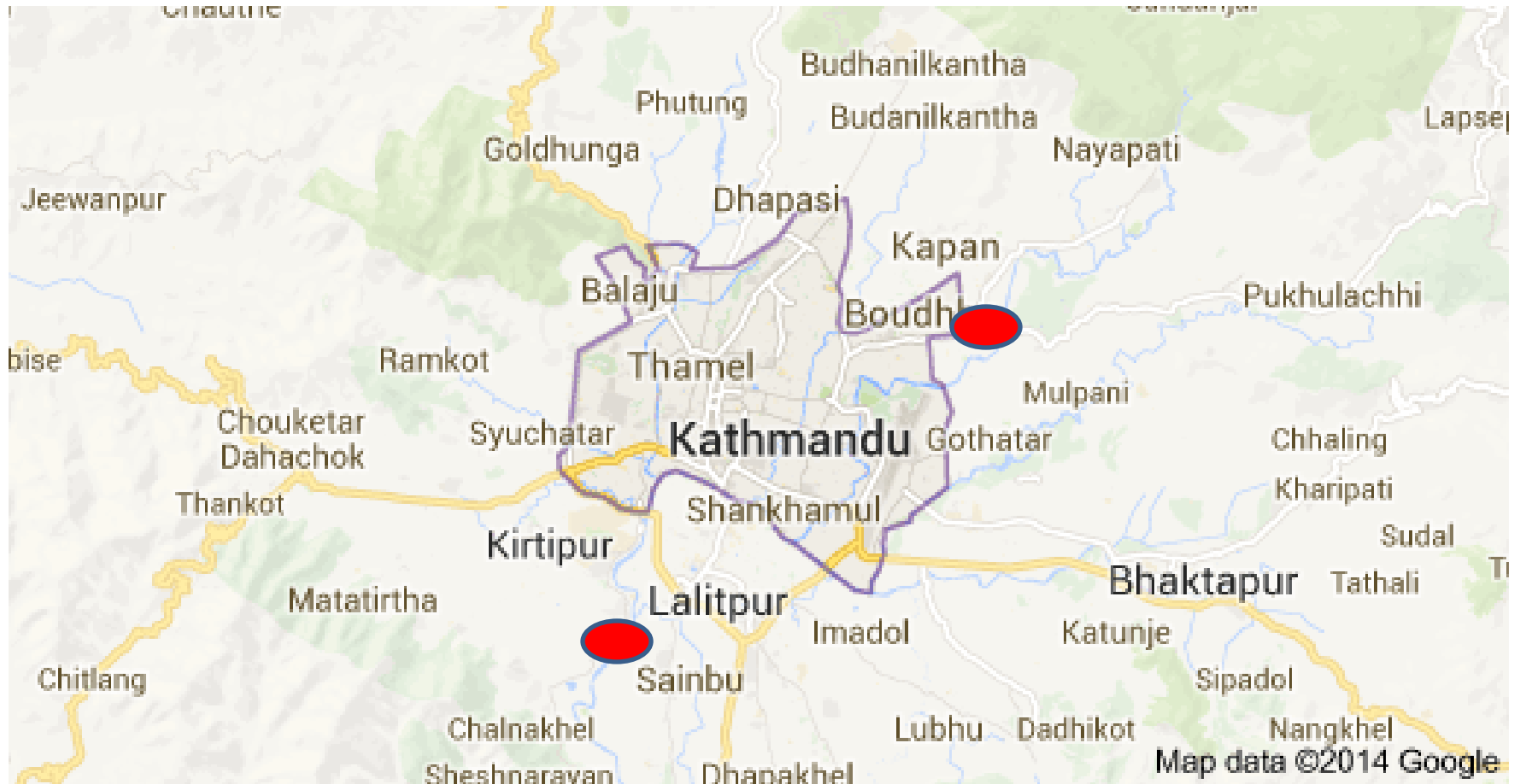
Specific Objectives

- Minimize flooding- monsoon
- Reduce air pollution
- Improve livelihoods
- Introduction of aquaculture

Methodology

- Site selection- 2 wetlands- 40 m³
- Data collection (secondary data)
 - Plant / fish sps
- Consultation workshops (Govt. Officials, stakeholders, community orgs, bioengineers)
- Integration - top-bottom -bottom-up

Site Map



Site

1. Lele Village, Lalitpur Kathmandu

- Population- 6928 inhabitants
- Area- 23.95 sq km

2. Sundarijal, Kathmandu

- Population- 2586
- Area- 5.18 sq km

Lele Village



Sundarikal



Source- Google

Artificial Wetland



Source- Google

Artificial Wetland



Source- Google

Outputs/ Outcomes

Outputs	Outcomes
Awareness programs at community level	Capacity building
Consultation and training with govt officials	Land Provision
Workshops with community organizations	Ownership
Construction of wetlands	<ol style="list-style-type: none">1. Reduce air pollution2. Improve water flow3. Reduce flooding4. Increase livelihood options

Budget

- Plant species (pollution tolerant, fast growing)- \$4000
- Fish (tolerant species)-\$4000
- Training workshops and awareness programs- \$12,000
- Construction material (sand, gravel)-\$6000

Total Budget- \$26,000

- ✓ Duration- 1 year
- ✓ Donors- EU

Risks and Limitations

- Initial maintenance cost
- Water treatment
- Security
- Logging/ blockage

Sustainability

Community ownership + Govt. involvement >
Sustainability

M & E

Monitoring and Evaluation

Conclusion

- Pilot Projects
- Feasible, increased ownership
- 5 wetlands

Thank You!!!!



Source- Google