



APPLICATION BULLETIN

NEPAL – KATHMANDU AREA DEVELOPMENT PROGRAM WORLD VISION INTERNATIONAL and CENTRE FOR INTEGRATED URBAN DEVELOPMENT

In August 2006 the SkyJuice Foundation joined with World Vision International and the Centre for Integrated Urban Development to install a potable water system on the outskirts of Kathmandu.

This installation is one of three installations in Nepal and is an excellent example of appropriate technology for urban poor without access to reliable or clean municipal water. The project was undertaken at Kathmandu Metropolitan City, Ward No. 12 on the banks of the Bagmati River.

The object was to treat poor quality well (ground water) with existing high levels of turbidity, Manganese, Iron and elevated fecal counts. There was a simple aerating tower constructed as pretreatment to the filtration unit with a multiple tray gravity aerating (3 stage) tower. This was effective in reducing Iron and Manganese. This project was the first stage in a progressive upgrade of the water supply.

The community now has documented results that verify removal of bacteria. Sixty households now have access to continual safe water (300 persons). The next stage of the project will be to address the low levels of Ammonia and Nitrate from sewage and effluent cross-contamination. The long term objective of the project is to ensure that the water fully complies with the WHO guidelines. The installation of the SkyHydrant has had a dramatic impact on the water quality. An important aspect of the project was the extensive training and community liaison prior to the installation.



3 Stage Aerating Tower Pachali

Lessons learnt from this project are applicable to many community water projects. These are:

- No-one follows up and looks after unit. Regular follow up required
- Everyone expects free water
- Total water quality must include ALL aspects of the feed water, not just colour, turbidity and bacteria
- Training, support and follow up is critical for success
- Nitrates are an ongoing issue in groundwater contamination (wells)



SkyHydrant installation Kirtipur



Community participation at Kirtipur installation