

# Manure Transfer Pumps

By Bradley Masschelein



# Introduction

Introducing automation and more advanced technologies within the agriculture in Nepal is one of the best ways of furthering the economy along with providing more food for people and making more jobs available to those without jobs somewhere along the line of the food industry. The industrial revolution changed North America for the better, and it may just change Nepal for the better as well.

Hon. Gauri Shankar Chaudhary -- Minister of Agriculture in Nepal

Lawrence MacAulay -- Minister of Agriculture in Canada

Gordon & Walter Grose -- Company owners of Husky Farm Equipment



# Clear description of the product

A manure transfer pump rotates an impeller at high speeds to create suction and force manure up the pipe of the pump and out of the manure storage container to the desired area.

Husky Farm Equipment manufactures a variety of different manure transfer pumps of various different diameters and types.

Husky Farm Equipment is not the only company that sells manure pumps. A few other companies in Ontario include:

Gea Houle Farm Equipment

Nuhn Industries LTD



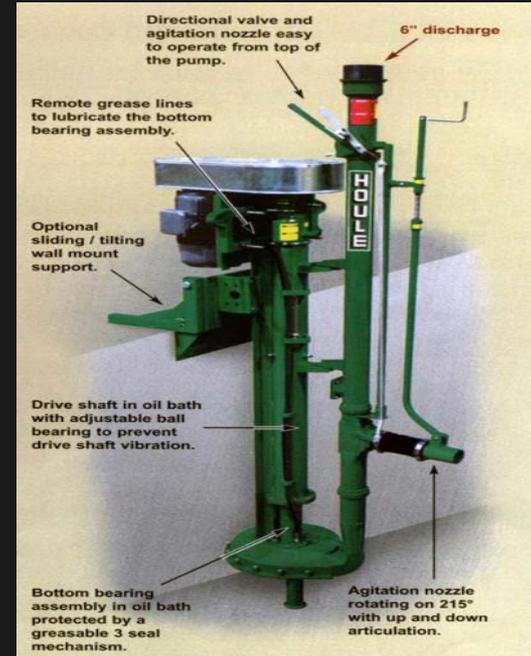
# Types of Pumps

Powered by a PTO shaft of a tractor

Powered by an electric motor  
PTO driven manure pump  
from Husky Farm Equipment



Electric manure pump from Gea Houle Farm Equipment (Different brands but the same technology)



# Need for the product

Labour force is declining in Nepal

Productivity is low in crops

Chemical fertilizer is costly

Crop productivity is low due to lack of fertilizer

Low productivity leads to a



# Benefits of the Product to Canada

Helps a local business (Husky Farm Equipment) expand into a larger international business

Helps Canada's economy by increasing Canada's exports

As the business expands, more jobs can be created



# Benefits of the Product to Nepal

Increase in yield in crops

Decrease in nitrogen leaching

Helps the community through possibly sharing the equipment

Manure is being u



# Setbacks to the product

Initial price of the machinery (PTO shaft operated pump)

Mobility of the equipment

Husky Farm Equipm

sell internationally



# Overcoming setbacks

Ship parts to Nepal and have them assembled by trained employees from Nepal

Market the electric manure pump more heavily to reduce initial cost and to help solve mobility problems with the PTO operated pump

Electric manure pumps are a much cheaper and more mobile version of the PTO operated version

Manure pumps also double as water pumps and could be used for irrigation



# For Further Information

Nepal's Ministry of Agricultural Development

<http://www.moad.gov.np/en/>

Agriculture and Agri-Food Canada

<http://www.agr.gc.ca/eng/home/?id=1395690825741>



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