



Country Presentation Paper

(Nepal)

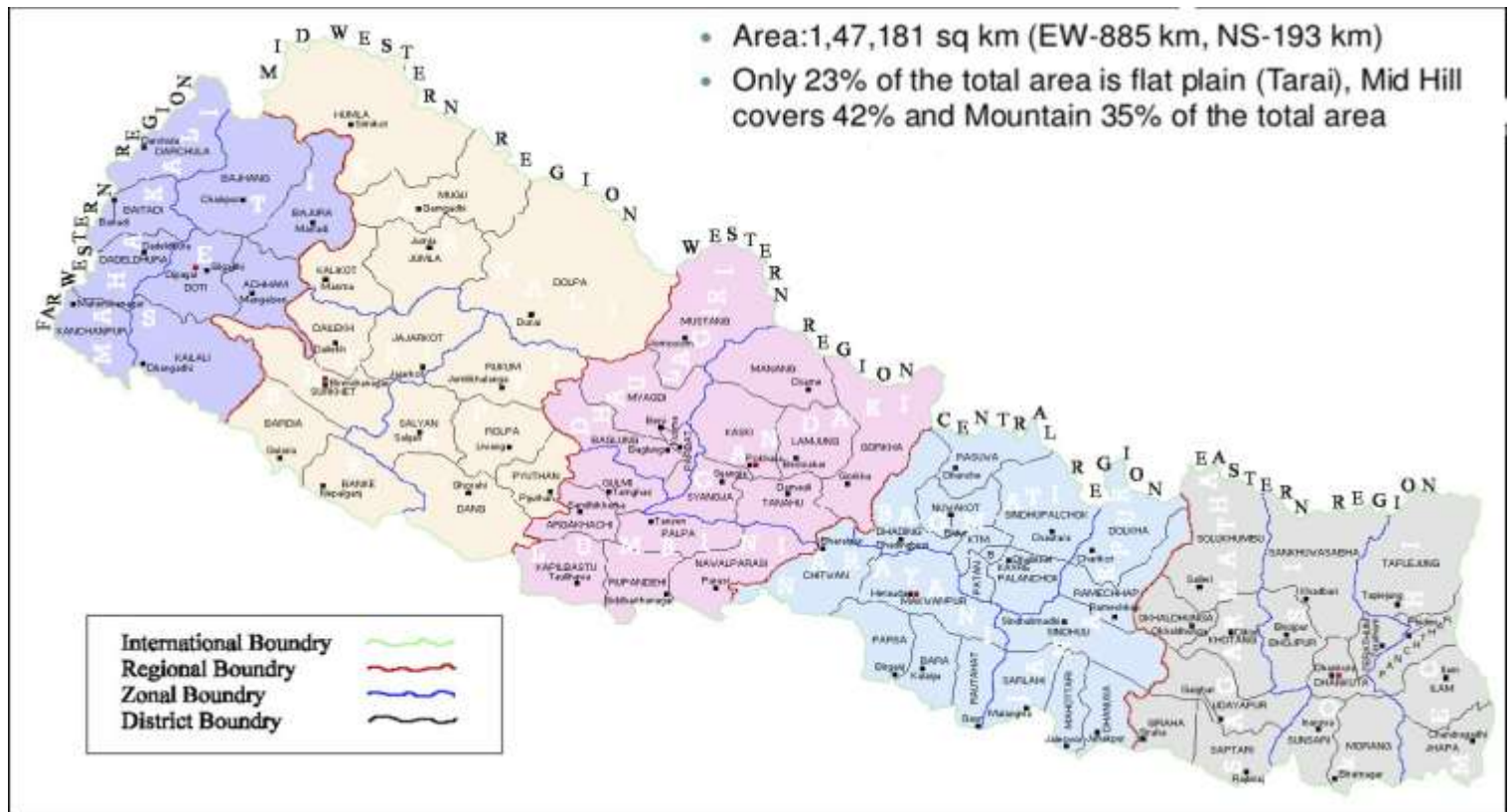
Regional Roundtable of National Agricultural Machinery Associations in Asia and the Pacific

Connection for Cooperation and Development
28-30 October 2014

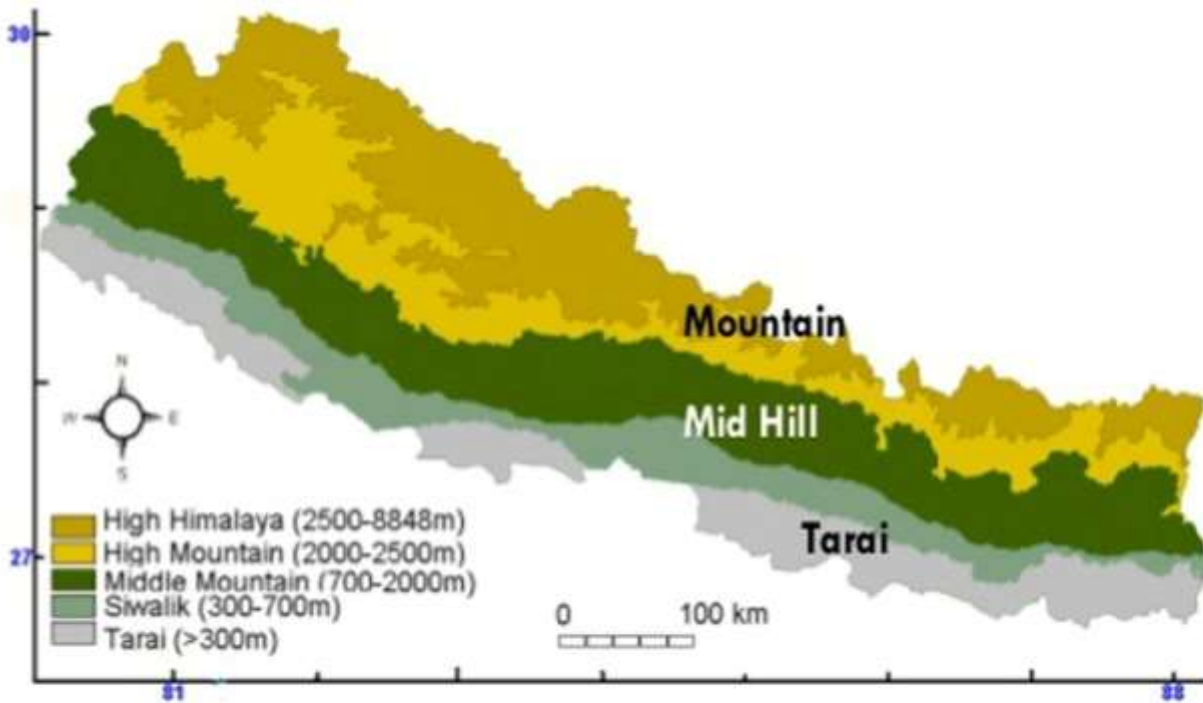
Wuhan, China

(Mahendra Pd. Kandel)

Political map of Nepal

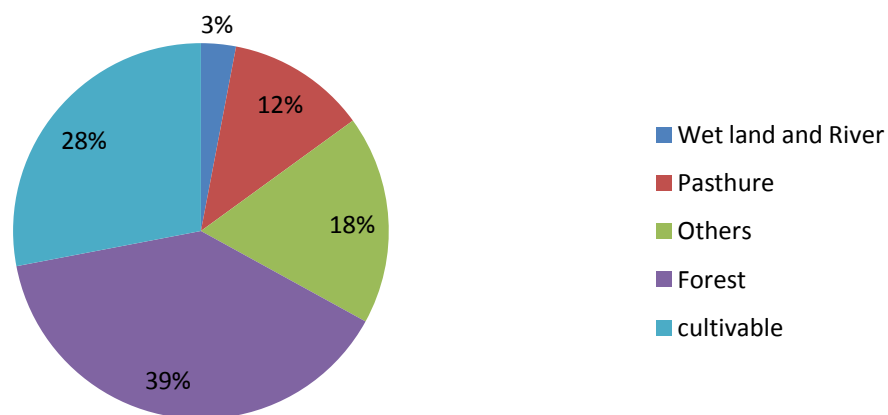


Physiographic Regions



- Farming systems: Rice-wheat in Tarai, Maize based in mid Hills and potato and livestock based in Mountains

Cultivable land area

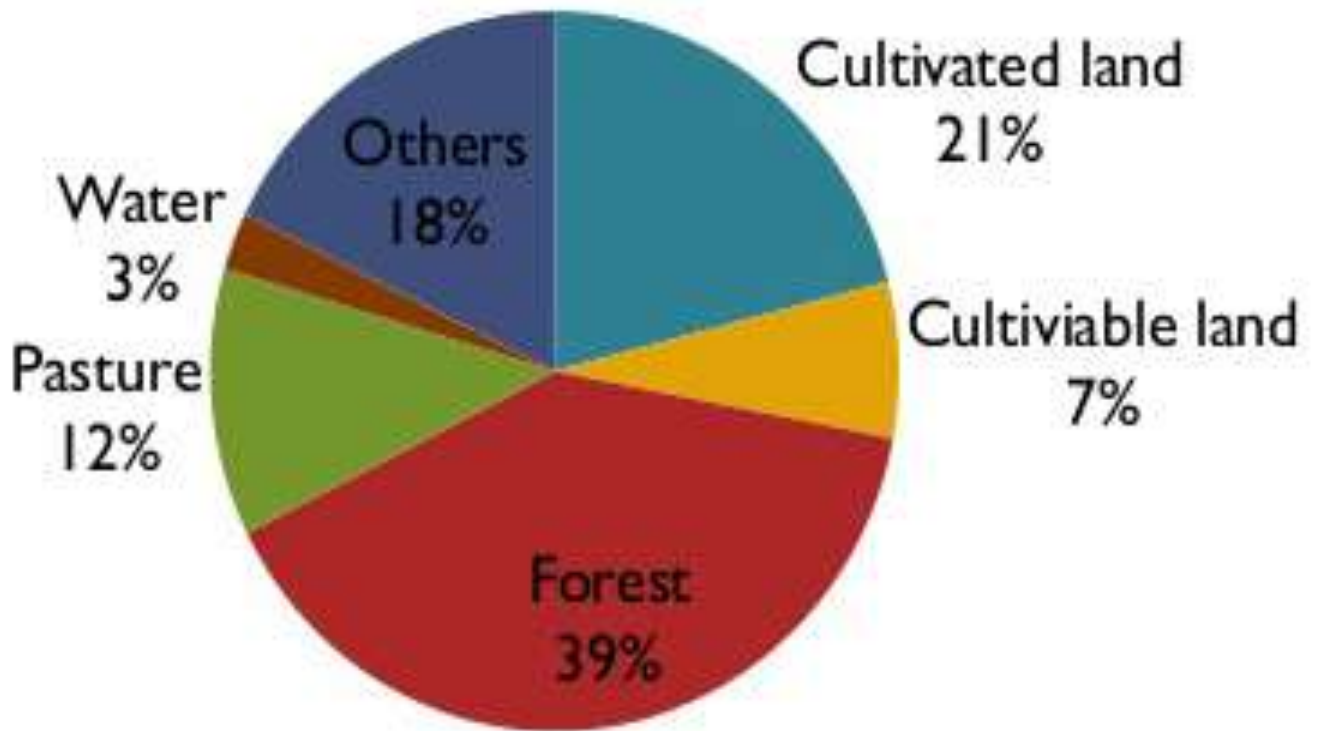


Nepal Agricultural Machinery Entrepreneurs' Association(NAEMA)

- Formed on the occasion of National Level Agri fare last April
- 96 Members from all over Nepal
- Mainly National Level Members, Importers, Retailers, Fabricators
- Increasing Membership including District Level Member
- No. similar organization exist



TOTAL CULTIVATED LAND



Average Land Holding Size

	No. of Holding	Area Of Holding	Av holding size, ha
Mountain	298,223	218,707	0.73
Hill	1, 586,406	1,038,615	0.65
Tarai	1,479,510	1,396,716	0.94
National	3, 364, 130	2,654,037	0.79

Characteristics of Nepalese Agriculture

- Dominated by subsistence and small holding agriculture
- Contributed 35% GDP
- Low investment
- Shortage of manpower due to migration to international market
- Low utilization of Machinery
- Diversity due to varied Agro-economic zones(60 m to 8848m)
- Marred by the huge subsidies given by Neighbouring countries
- Low Priority by Governments in past



Status of Agriculture Mechanization

Traditional



- Largely dependent on draft power
- Improved plough is limited to only 26% farmers

Status of Agricultural Machanization Contd.....

Tillage



- 8 % use Tractor all over Nepal and it is 18% in Tarai
- Four wheel tractors are the major tillers in tarai
- Custom Hiring is well established there
- Mini Tillers have increased in hills as they are portable

Status of agri. Mechanization contd.

Planting and seeding

- Rice is Manually planted
- Wheat is Broadcasted
- Seed Drills are being used for maize, Lentils, and even in wheat
- Companies are promoting zero till seed drills



Status of agri Mechanization contd.

Irrigation

- Need to depend on rain water to plant crops
- 42% area irrigated and 18% year around
- Deep boring are abundently used for irrigation
- Pump sets are used for irrigation
- Low cost drip and sprinkle irrigation is used in vegetables
- Solar Irrigation system introduced



Agri mechanization contd.

Harvesting

- Still manority is throughg human power using sickles
- Mini Tiller and walk behind tractor reaper and inreasing
- Four wheel tractor reaper and combined harvesters are increasing



Agri mechanization contd.

Theshing

- 4-5 Hp portable threshers are used
- Bigger theshers and combined harvesters are also used
- Combined harvesters are used in custom hiring



Agri Mechanization contd.

Transportation

- Four wheel tractor, walk behind tractor are replacing Draft power
- Human, Animal and Mechanical power



Agri Mechanization contd.

Processing

- Seller, Huller, Grinding Mill , Oil expeller, are common
- Need efficient and easily handling machines for processing coffee, cardamom, Jinger



The distribution/supply chain of agricultural machinery

- Black smiths: Traditional iron plough, sickles, tools. etc.
- Small Fabricators: paddy threshers, Trailers
- Importers: All Machines
- Dealers/ Sub dealers: sales and repair maintenance
- Small service centres/ work shops
- Custom hiring
 - Threshers
 - Four wheel tractor
 - Combined Harvesters

Agricultural Mechanization policies including trade and investment policies

Highlights of the recent policy

- To ensure Productivity, competitiveness, sustainability and commercialization
- Adopted PPP approach, women and environment friendly
- Support on Technology Transfer to traditional Machines
- Trade shows, advertisement to increase machine use.
- Govt to provide Subsidy on purchase of Agri Machines and subsidy on interest rates to purchase Machines
- No policy for investment in agriculture
- Foreign Companies are barred in Trading sector

Challenges and constraints for a sustainable agricultural machinery sector

- **Little knowledge and Exposure towards Machinery**
- **Availability of appropriate Machinery & Tools for different agro economic zones**
- **Mechanization is limited due to difficult terrain and land fragmentation.**
- **Traditional blacksmiths are required to be trained on fabrication of spares and tools.**
- **Limited Research & Development and regulatory Mechanizm**
- **High Bank interest**

Bigger roles for the Associations in promoting domestic Agricultural

- **Promoting agri-Mechinazation.**
- **Establish regional co-operation to identify and develop suitable machines**
- **Identify suppliers and quality of product**
- **Formulation of new policies and programs**
- **Sharing of information and experience**
- **Joint trade shows and advertisement**
- **Reach to remote places**

The need and feasibility of Regional Network/Council

- It is time to establish a Regional Network/Council
- Its feasible
- To Bring all in one common platform
- Will help to access intr'n'l market
- Sharing of ideas, techniques and policies

Possible structure and functions and Benefits of Network/Council

Structure:

- A general assembly of all members
- An executive committee consisting of 9 or 11
- Chairman and 4 vital posts elected by Gen assembly
- Rest members selected on consensus

Benefits:

- NAEMA is recently formed baby organization
- Access to international market
- Sharing of techniques
- Access to new thoughts, processes, policies

We talk about food security, productivity.
But see the food wastage.
We need to change ourselves.



THANK YOU