## Prosperity, Pride, and National Integrity: Asta-Ja for Economic Revolution in Nepal

**Presented to:** 

Asta-Ja Inaguration, December 24, 2008

Kathmandu, Nepal

Presented by: Durga D. Poudel, Ph.D.

The Founder of the Asta-Ja Framework and the International Coordinator Asta-Ja Abhiyan, Kathmandu, Nepal

## Acknowledgement

Google and internet Those who have put their pictures in the internet that I have used Asta-Ja Office Staff, Kathmandu, Nepal Asta-Ja Family, USA

## **Global Economy**



Ref: www.corbis.com

## **Fossil Fuel Based Economy**



http://i2.photobucket.com/albums/y32/efros2/roundabout.jpg



http://cruises.simsfamtrav.com/carnival/Dream/carnival-dream-endering.jpg



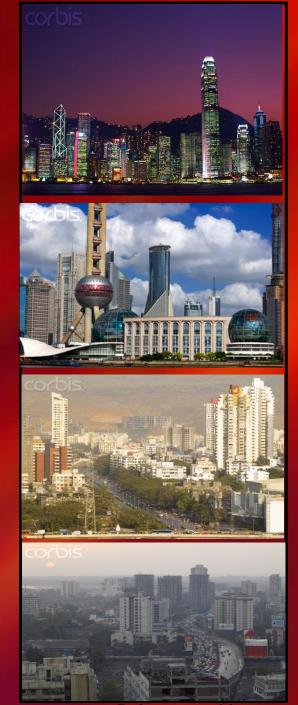
### http://www.chinadaily.com.cn/china/2007-04/18/xin\_37040418063186922441115.jpg



http://farm2.static.flickr.com/1360/1438885268\_e43754faf1.jpg

# Comparing with our neighbors

- China has the third largest economy in the world after the United States and Japan with a nominal GDP of US\$3.42 trillion (2007)
- China's per capita income has grown at an average annual rate of more than 8% over the last three decades
- The IT sector in India has become the biggest employment generator especially amongst young college graduates.



Ref: www.corbis.com

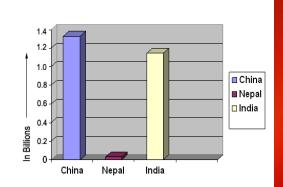
# Comparing with our neighbors



**Bird Nest** 



Long-March II-F







China: 1,330,044,605 India: 1,147,995,898 Nepal: 26,427,399

Mission Chandrayaan-1 to the Moon

Ref: www.corbis.com

India's IT Market

## **Global Economic Environment**

- Globalization
- Global Climate Change
- Information Technology
- Energy, Water, Land, Food
- Cultural Change
- Equity, social fabric
- Peace and harmony
- Economic Crisis



Ref: www.corbis.com

## Environment, Health and Poverty



Qingai River, along the Yangtze near Chongqing in Sichuan Province, is polluted by a paper mill. (China)



decaturmetro.com/.../



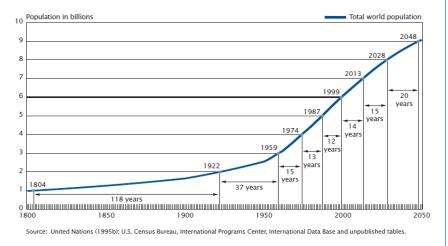
Helicopter Spraying Almond Orchard, CA



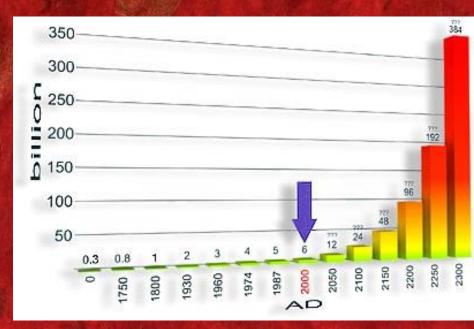
Fire on the Cuyahoga River 1969, Ohio Ref www.corbis.com

## World Population Growth

Figure 1. Time to Successive Billions in World Population: 1800-2050 The sixth billion accrues to world population in record time!



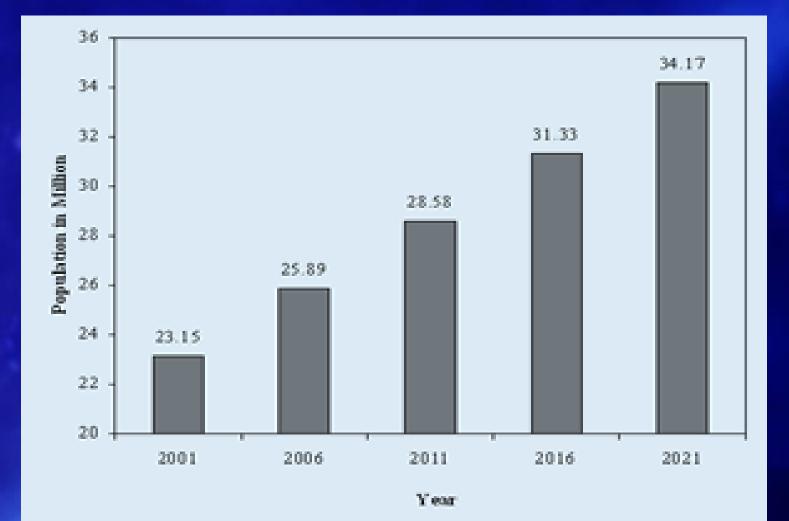
In the last 200 years we have caused more damage and destruction on this planet than in the previous 7 thousand years. Countless species of animals and insects becoming extinct, thousands of species last year alone, and millions of hectors of rain-forests.



If we continue at the present rate of destruction / consumption, the years 2100 and beyond look very bleak indeed

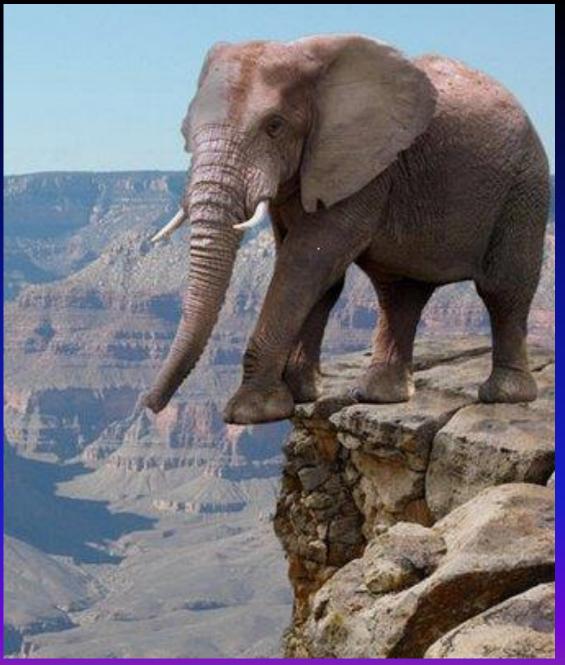
#### (<u>www.edu.ue-</u> foundation.org/worldpop.html)

## Nepal's Population Growth



www.cbs.gov.np/Population/Projection/default.htm

Global Economy Standing s no Precipice



www://bp2.blogger.com/.../s400/GOP+Precipice.jpg

## The Era of Historic Economic Transformation

- Lighter industries
- High-tech products
- High knowledge and skills
- Distant services
- Wholesome food and drinks
- Green products
- National security



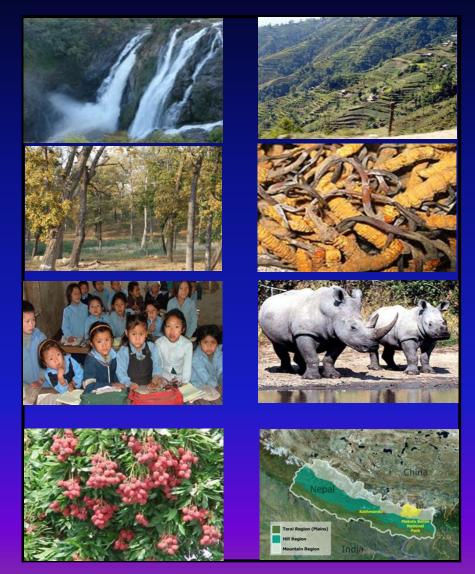


Foundation for Economic Transformation

- Renewable resources-based
- Environmental considerations
- Social justice and equality
- Quality life and pride
- Sustainable development

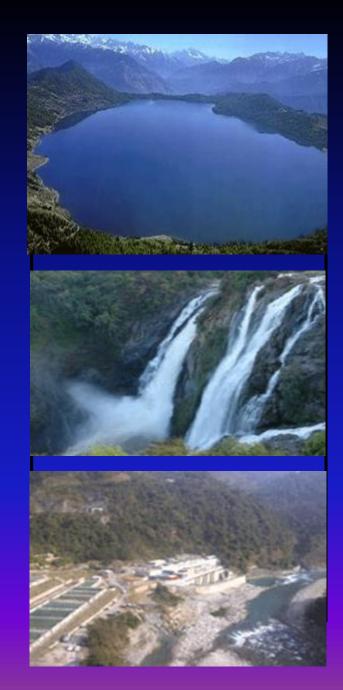
## Asta Ja for Sustainable Economic Transformation

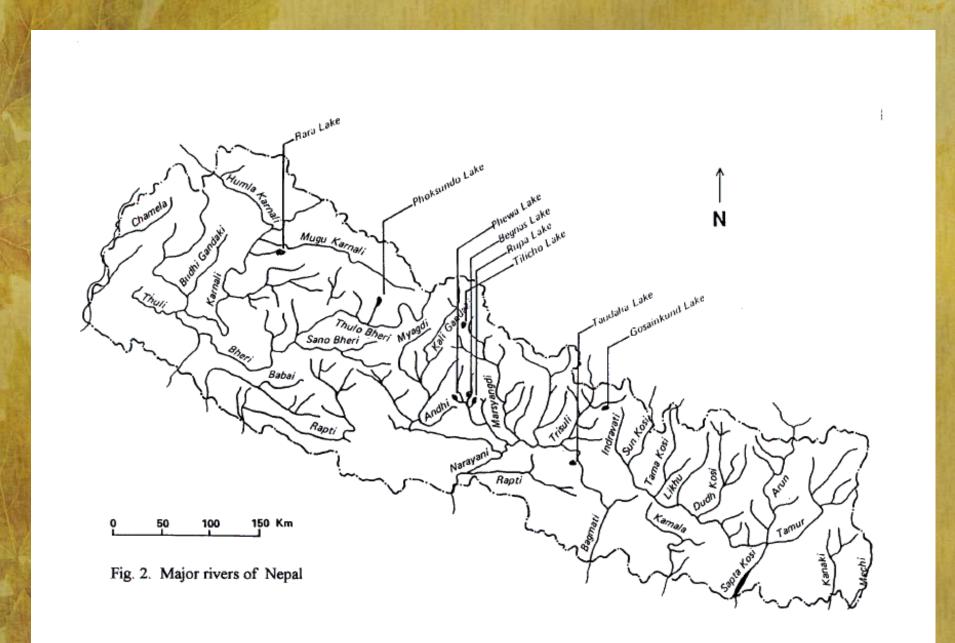
- Jal- Water
- Jamin- Land
- Jungle-Forest
- Jadibuti- Medicinal and aromatic plants
- Janasakti- Manpower
- Janawar- Animals
- Jarajuri-Plants
- Jalabayu-Climate



# Jal (water)

- 83,000 MW Capacity
- 42,000 Economically Feasible
- 600 MW Current
  Installed Capacity
- 3,000 MW Nepal's Demand
- 39,000 MW for export
- Groundwater





http://www.fao.org/docrep/003/x2614e/x2614e03-2.gif





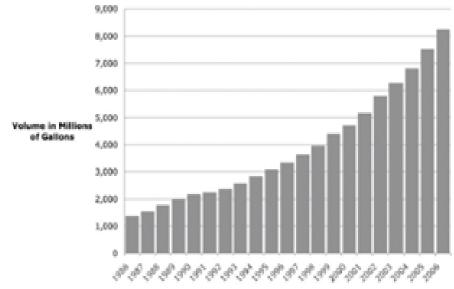
3,300 glaciers in the Nepalese Himalayas contain 2,300 glacial lakes





## **Bottled Water**

- Increasing demand for bottled water in many countries like India, China, Taiwan, South Korea, Japan and other gulf countries
- Sales of Bottled Water (1986-2006)



Source: Beverage Marketing Corporation, as reported in Beverage World. 2007

 From hydroelectricity and bottled water Nepal can earn 100s of millions of dollars annually



## **Consumption of Bottled water**

	2000			2005			
Country	Total Volume	Share of Global Consumption	Consumption Per Person	Total Volume	Share of Global Consumption	Consumption Per Person	
	(million liters)	(percent)	(liters)	(million liters)	(percent)	(liters)	
United States	17,955	16.5	61.6	28,651	17.4	99.2	
Mexico	12,464	11.5	124.3	18,861	11.5	179.7	
China	6,012	5.5	4.7*	12,901	7.8	9.9*	
Brazil	6,838	6.3	39.0*	12,252	7.4	65.8*	
Italy	9,251	8.5	160.4	11,145	6.8	191.9	
Germany	8,427	7.8	101.8	10,581	6.4	128.4	
France	7,456	6.9	126.2	8,424	5.1	139.1	
Indonesia	4,314	4.0	20.2*	7,633	4.6	33.3*	
Spain	4,221	3.9	105.6	5,923	3.6	147.1	
India	2,157	2.0	2.1*	6,177	3.8	5.6*	
All others	29,391	27.1		41,982	25.5		
Total	108,517			164,530			
Global average			17.9			25.5	

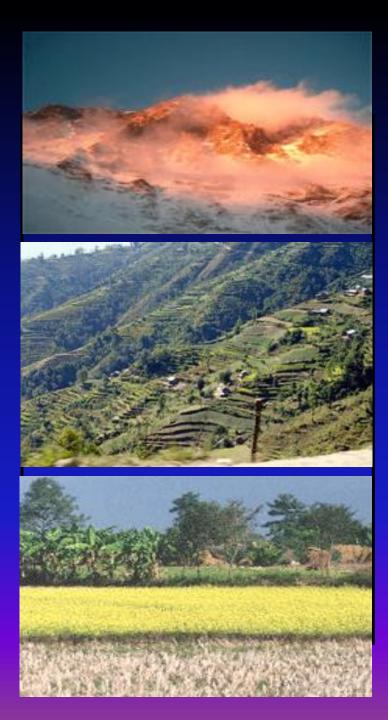
Source: International Bottled Water Association.

\* These numbers are not directly available; they were calculated with population data from the U.S. Bureau of the Census.

#### © 2007 Worldwatch Institute

## Jamin (land)

Phulchoki Iron mine -10 million tons of iron 31 cupper mine sites, Natural gas, Marble, Pyrite, Gems, Limestone,Magnesite, Gravel and rocks, Sand



# Global Tourism



#### World: Inbo und tou ris m

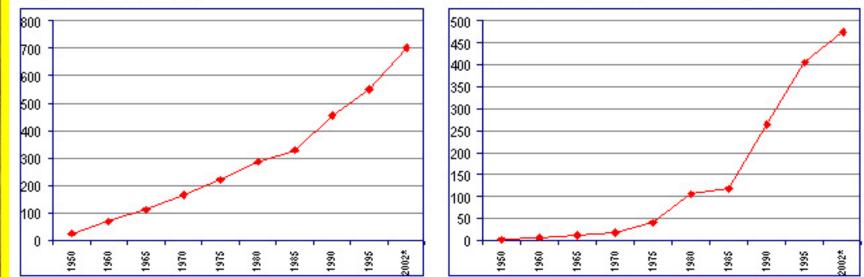
#### World: Inbound tourism

International Tourist Arrivals

#### (million) Internat

#### ) International Tourism Receipts

#### (US\$ billion, current prices)



Source: World Tourism Organization (WTO) ©

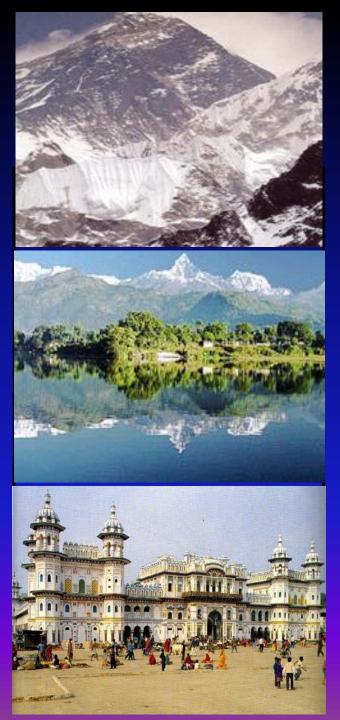
# Major Tourism Destinations

World's Top Tourism Destinations (absolute numbers)

Rank				nal Tourist s (million)		Change (%)		Population 2002	Arrivals per 100 of
		2000	2001	2002*	2001/2000	2002*/2001	2002*	(million)	population
World		687	684	703	-0.5	27	100	6,228	11
1 France	TF	77.2	75.2	77.0	-2.6	2.4	11.0	60	129
2 Spain	TF	47.9	50.1	51.7	4.6	3.3	7.4	40	129
3 United States	TF	50.9	44.9	41.9	-11.9	-6.7	6.0	288	15
4 Italy	TF	41.2	39.6	39.8	-3.9	0.6	5.7	58	69
5 China	TF	31.2	33.2	36.8	6.2	11.0	5.2	1,279	3
6 United Kingdom	VF	25.2	22.8	24.2	-9.4	5.9	3.4	60	40
7 Canada	TF	19.6	19.7	20.1	0.3	1.9	2.9	32	63
8 Mexico	TF	20.6	19.8	19.7	-4.0	-0.7	2.8	103	19
9 Austria	TCE	18.0	18.2	18.6	1.1	2.4	2.6	8	228
10 Germany	TCE	19.0	17.9	18.0	-5.9	0.6	2.6	82	22
11 Hong Kong (China)	VF	13.1	13.7	16.6	5.1	20.7	2.4	7	227
12 Hungary	VF/2	15.6	15.3	15.9	-1.5	3.5	2.3	10	158
13 Greece	TF	13.1	14.1	14.2	7.3	0.9	2.0	11	133
14 Poland	TF	17.4	15.0	14.0	-13.8	-6.8	2.0	39	36
15 Malaysia	TF	10.2	12.8	13.3	25.0	4.0	1.9	23	59
16 Turkey	TF	9.6	10.8	12.8	12.5	18.5	1.8	67	19
17 Portugal	TF	12.1	12.2	11.7	0.6	-4.1	1.7	10	116
18 Thailand	TF	9.6	10.1	10.9	5.8	7.3	1.5	64	17
19 Switzerland	TF	11.0	10.8	10.0	-1.8	-7.4	1.4	7	137
20 Netherlands	TCE	10.0	9.5	9.6	-5.0	1.0	1.4	16	60
21 Russian Federation	TF	7.0	7.4	7.9	5.3	7.3	1.1	145	5
22 Saudi Arabia	TF	6.6	6.7	7.5	2.1	11.7	1.1	24	32
23 Sweden	'CE/T	2.7	7.2	7.5	160.5	4.3	1.1	9	84
24 Singapore	TF	6.9	6.7	7.0	-2.8	4.0	1.0	4	157
25 Croatia	TCE	5.8	6.5	6.9	12.2	6.1	1.0	4	158
Source: World Tourism C	)rganizatio	n (WTO) @	9	WTO, 2	2005	(Data	as collecter	iby₩TO Sept	ember 2003)

# Jamin (land)

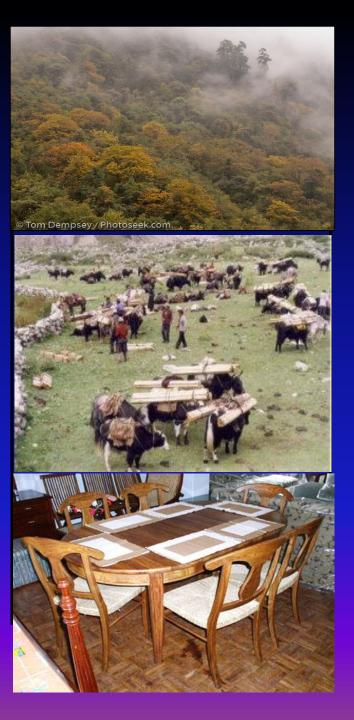
From tourism, minerals, gravels and sand, marble, etc. Nepal can earn 100s of millions of dollars annually



Ref: www.corbis.com

# Jungle (forest)

From Forest resources, timber, plywood, paper, furniture, etc. Nepal can earn 100s of millions of dollars annually



# Jadibuti (medicinal aromatic plants)

- Nepal's plant diversity is enriched with so many plant species.
- From herbs Nepal can earn 100s of millions of dollars annually.



http://www.kidsgardening.com

## Janawar (animals)

- Live animals, meat, milk and cream, natural honey, and animal fats are some of the major export items from Nepal.
- From animals, milk, cheese, hides and skins, furs, eggs, meat, etc.
   Nepal can earn 100s of millions of dollars annually.



# *Jarajuri* (plants)

From fruits, vegetables, and other crops Nepal can earn 100s of millions of dollars annually.



### Florida firm has 1 million jatropha seedlings in ground as jatropha begins take-off in US April 7, 2008

In Florida, My Dream Fuel has 1 million jatropha seedlings in the ground in Hendry County, and is planning to open a 150,000 sq ft seed crushing unit to produce jatropha oil for the US market. The company is also promoting its seedling product to farmers, to switch to jatropha production for their marginal lands. Sunshine Biofuels is exploring the establishment of a biodiesel production facility in Collier County to process the oil. a start-up company formed two years ago to build an alternative fuel plant.







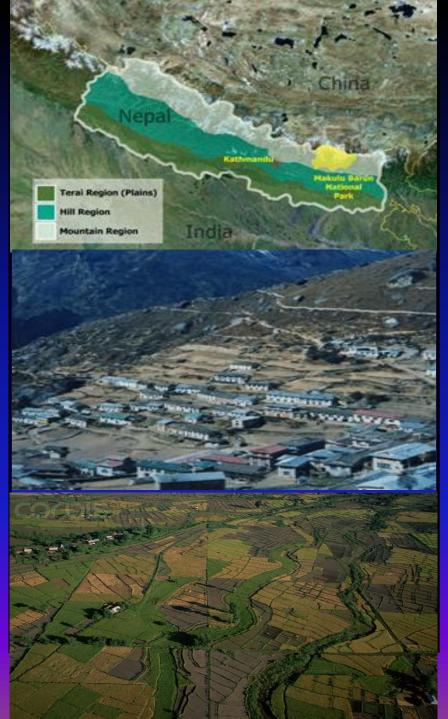
http://www.biofuelsdigest.com

## Jalabayu (climate)

With agro ecological advantages, high altitude research, vegetable seeds, flowers, theme parks, vacation resorts, etc Nepal can earn 100s of millions of dollars annually.

Retirement homes/second home.

Ref: www.corbis.com



Janasakti (manpower) Students enrollment 2005/2006 (CBS, 2007) Ag. and Animal Science - 373 Engineering - 661 Sanskrit - 1,024 Forestry - 1,570 Science and Technology - 4,559 Hum. and social sci. -13,343Medicine - 32,879 Law - 41,740 Management - 55,712





## Janasakti (manpower)

From skilled manpower and industries such as health, IT, education, music, film, tourism Nepal can earn 100s of millions of dollars annually.



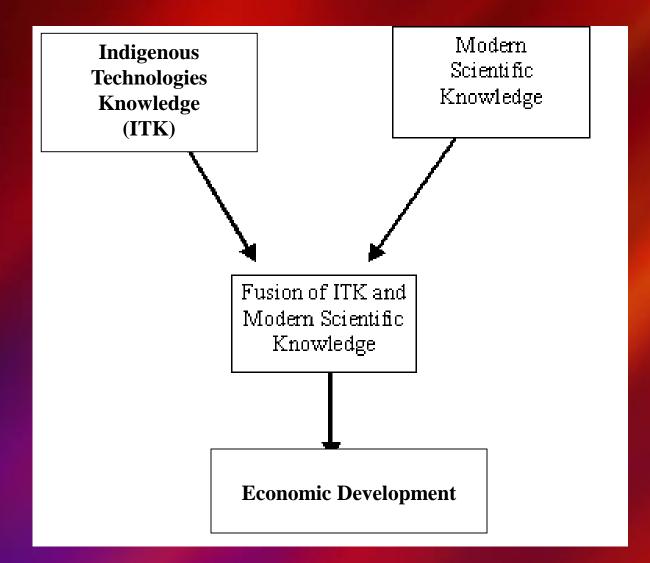
Asta Ja	Assessment	Approaches
Jal- Water	Rivers and streams, lakes, glaciers, snow peaks, groundwater, discharge, floods, hydrology, hydroelectric capacity	GIS, RS, GPS, Cross Sections, Aquafer Systems, Rating Curves, Water Quality, Gauges, modeling, surveys, ANN
Jamin- Land	Fragmentation, productivity, mining, land use types, tourism sites, soil quality, land ownership, conservation, border issues	Land capability, GIS, RS, GPS, Mine Surveys, Tourism surveys, Geological surveys, Geo-statistics

Asta Ja	Assessment	Approaches
Jarajuri - plants	Diseases, Pests, variety, yield, production, marketing, processing, agro-industries, production zones	Breeding, IPM, database, cropping system research, field trials, marketing research, crop modeling, GIS
Jalabayu - climate	Climate change, impacts on resources, adaptation, trends, linkages, weather forecasting	Observation network, modeling, impacts study, adaptation research, extreme weather

Asta Ja	Assessment	Approaches
Jungle-forest	Forest Cover, Changes, Problems, Sustainable Harvest, Reforestation, Conservation, Preservation, Community Forestry	Forest Mapping, Productivity assessment, Non- timber Products, Diseases, GIS, Invassive plants
Jadibuti – medicinal and aromatic plants	Identification, distribution, commercialization, ecology, chemical analysis, market potential, production zones	Mapping, field/ green house study, chemical extraction, market survey, ecological research, GPS, propagation

Asta Ja	Assessment	Approaches
Janasakti	Population distribution, migration trends, Academics, Research skill, ITK	School enrolment, Manpower, Survey, Skill Development, Statistical Analysis
Janawar	Productivity, diseases, management, wild life, breeding, pests, production, zoos, game fishing, bird watching, production zones	Genetic improvement, database, wildlife, surveys, production and management research

## Indigenous technology knowledge and modern scientific knowledge



ओषधिर्नामरुपाभ्यां जानते ह्यजपा वने । अविपाश्चैव गोपाश्च ये चान्ये वनवासिन: ॥ चरक संहिता सूत्रस्थान १-१२० (१०००-५०० ई.पू.)

The shepherds, forest dwellers and local indigenous people know the proper use of plants by their name and characters. Charak Samhita Sutrasthan 1-120 (1000-500 B.C)

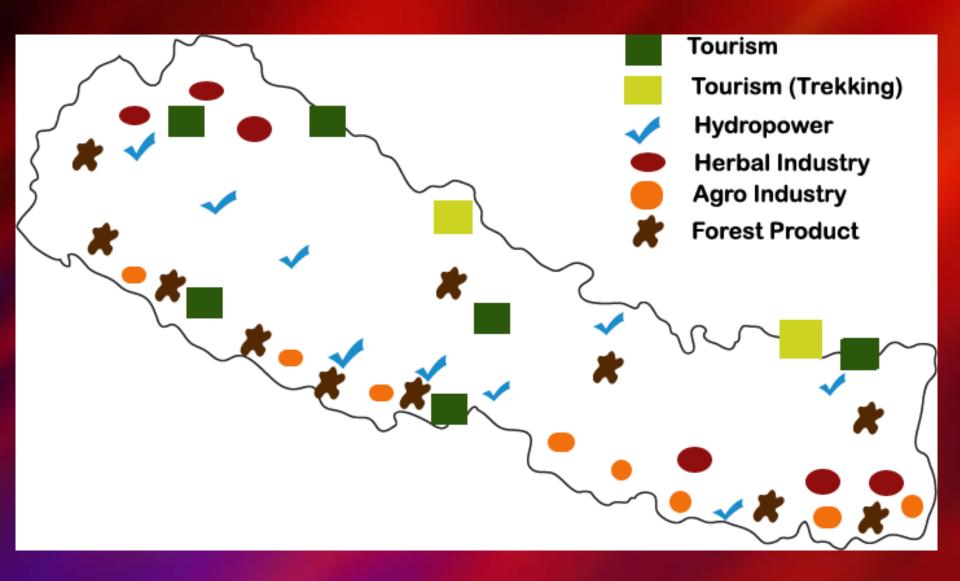
### **Economic Analysis**

Social Accounting Matrix (SAM) Flows of economic transactions. Expenditures and receipts.

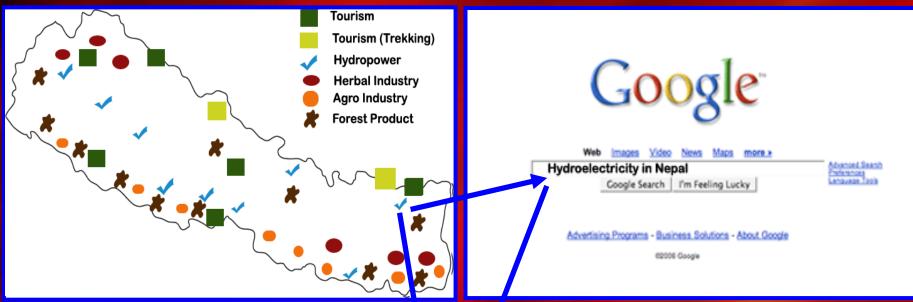
Input Output Analysis Inter-industry relations in an economy.

Linkage Analysis Forward linkages and backward linkages

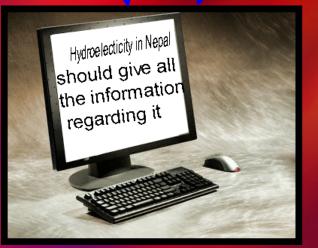
## Nepal Investment Map



## Nepal Investment Information System (NISS)



- Biophysical
- Socioeconomic



- Institution
- Policies, laws, regulations, taxes



## Asta Ja

# Abhyan

Nepgel

नेगव सरकार गृह मन्त्रालय जिल्ला प्रशासन कार्यालय काठमाडौँ काठमाडौँ काठमाडौँ

Antia Fall 205 X 107 199 anti Fall 205 X 107 199 anti A 228 (534)

प्रमाण-पत्र

अण्ट ज अश्रियान, तेपाल नामक संस्था, संस्था दतां ऐन २०३४ को दफा (४) बमोजिम मिति २०६५ । ० ८ । १९ मा दर्ता गरी यो प्रमाणपत्र दिइएको छ ।

भी अध्यक्षज्य,

लीन खुरा भट्राई

स्थानीय अंधिकारीको सही पुरा नामः-

110 feel

द्रष्टव्य:- यो प्रमाणपत्र हरेक आर्थिक वर्ष भित्र नवीकरण गर्नु पर्ने छ।

दर्जा:-

#### **Objectives**

Sustainable natural resources development, utilization and management

Achievement of fast-paced economic growth

Building a sustainable, prosperous, equitable, and just society

The enhancement of environmental quality through the framework of Asta-Ja

#### Asta Ja Abhiyan Nepal, Board



Chairman Mr. Lok Krishna Bhattarai



Vice-Chairman Constitution Expert Mr. Chandra K. Gyawali



General Secretary Mr. Nilkantha Tiwari



Secretary Mr. Yadav Thapaliya



Treasurer Chandrika Thapa Magar



Member Pharsuram Bhurtel



Member Prof. Basu Sharma UNB, Canada



Member Prof. Deergha Adhikari UL Lafayette, USA



International Co-ordinator Prof. Durga D. Poudel UL Lafayette, USA

### **Asta-Ja Advisory Board**

Dr. Devendra Raj Pandey Mr. Padma Ratna Tuladhar Dr. Sundar Mani Dixit

#### Asta-Ja Abhiyan Nepal: Growing List of Life Members

Dr. Basu Sharma, NB, Canada Mr. Bhim Karki, Dallas, Texas, USA Dr. Deergha R. Adhikari, Louisiana, USA Dr. Durga D. Poudel, Louisiana, USA Dr. Bijay Karki, Louisiana, USA Dr. Krishna Poudel, Louisiana, USA Dr. Dilip Panthee, North Carolina, USA Mr. Shankar Gautam, Florida, USA Dr. Khusi Ram Tiwari, Florida, USA

Asta-Ja Abhiyan Nepal Five Components Community awareness

#### Policy advocacy

#### Management

Database and Nepal Investment Information System



#### Asta-Ja Awareness and the Management of Asta-Ja at Community Level



**Community Forestry** 



**Community Herb Garden** 



**Community Planning** 



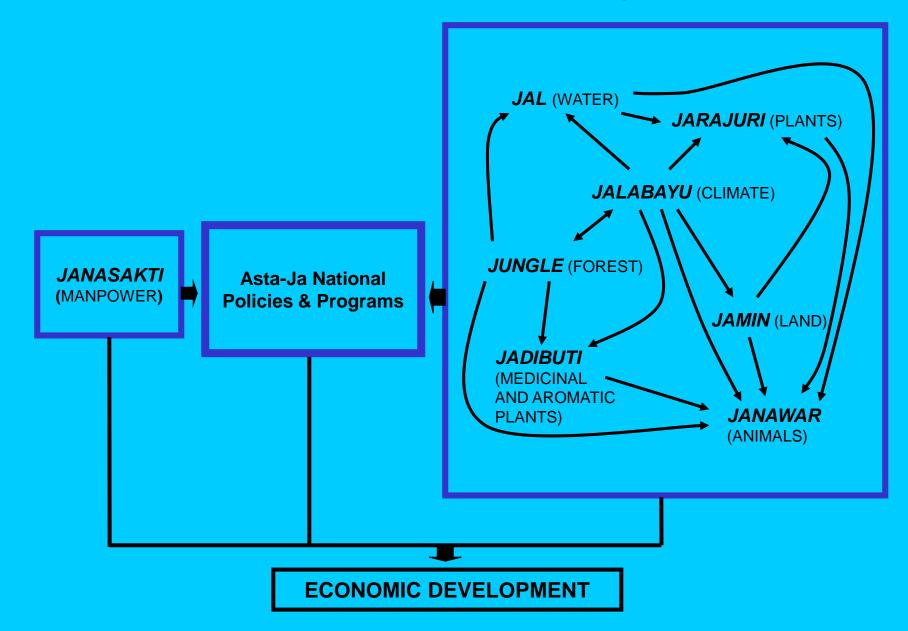
**Community Water User Group** 

**Community Land Management Community Culture and Tourism Community Pasture Management Community Wildlife Group Community Health and Education Community Skill Development Community Water Group Community Forestry Group Community** Jadibuti Group

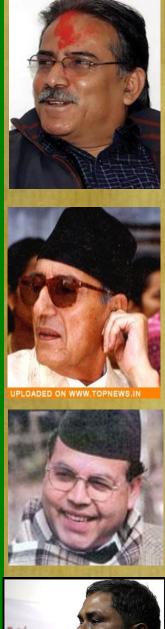
## Asta-Ja Campaign

- National office, regional offices, local offices
- Nepalese diasporas and international relations
- Community awareness and stakeholders involvement
- Volunteers, farmer's groups, watershed groups, forest groups, community herbal groups, etc.
- Conferences, workshops, town hall meetings
- Policy discussions and debates
- Documentation and outreach radios, TVs, newspapers, documentaries, brochures, booklets, art competition, quiz balls, poetry, exhibitions, public meetings, etc.

#### **Asta-Ja Policies and Programs**



- **Financial Policies**
- Industrial • **Policies**
- Resource • **Policies**
- **Educational** • **Policies**
- **Energy Policies** •
- Land Policies •
- Agricultural • **Policies**
- **Forest Policies**  $\bullet$
- **Tourism Policies** ۲
- Other policies •





Madheshi leader Upendra Yadav



www.scotland.gov.uk/.../2007/09/03145057/4

## Conclusions

- Asta-Jas are the treasures of Nepal.
- Holistic, participatory, interdisciplinary, and systems-based approach.
- Infrastructural development.
- Knowledge, skills and experiences.
- National movement.

Landscape uniqueness **Unique geopolitical setting Birthplace of Lord Budha** Culture, tradition, ethnicities **Unique political transformation process Unique economic transformation** through Asta-Ja

## Please join the Asta-Ja campaign and

## contribute to the Economic Revolution in Nepal

