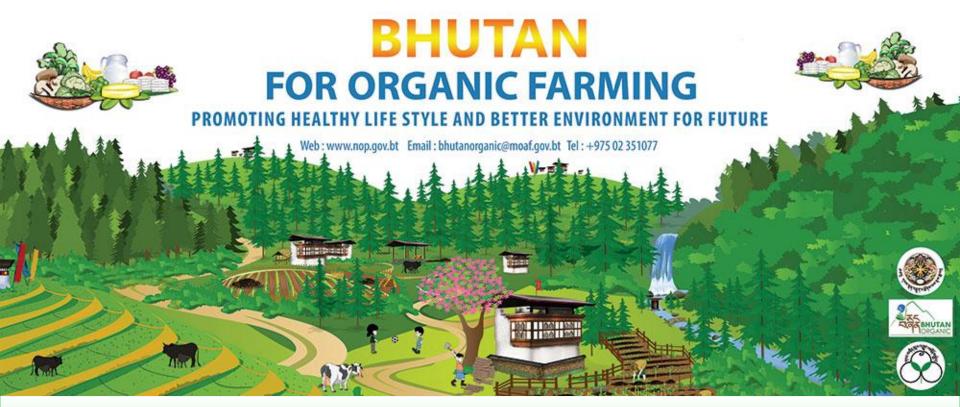
## Holistic Development through Organic Agriculture in Gasa: Bhutan



2<sup>nd</sup> Asian Local Government for Organic Agriculture (ALGOA)

Summit

September 28th - 30th, 2016, Goesan County, South Korea



## **Outline of the presentation**

- ☐ Country profile and Introduction
- Vision and Mission of the District
- ☐ Why Gasa was declared as a first Organic District in the country?
- ☐ Agriculture crops grown organically and its annual production in the district
- ☐ Current scenario of organic agriculture in Gasa
- ☐ Policies of Organic Agriculture in the District
- ☐ Way forward/ Future plans
- ☐ Some of the collaborative Agencies with the District
- ☐ Issue and Challenges
- Conclusion





## **Country profile and Land use**





Vangduephodrang

Chhukha

Trongsa

Bhutan is a small kingdom in the Himalayas (38394Sq.km)

<80 % of the area under forest cover

51.44% under National Parks& protected areas

3 % under human settlement & cultivated areas.





#### Cont.....





☐ Altitude: Varies from 160 m to 7550 masl

□ Climatic zones: subtropics in south (high annual rainfall-5500mm) to alpine in the north(low rainfall-400mm).

□ Population: 745,153 (NSB.2014) 79% reside in the rural areas.

☐ Major Industries: Hydroelectricity generation, Agriculture, Forestry, Tourism

☐ Main Occupation: Agriculture and livestock raising (69 %). 15.7% GDP; 60% labor force.





#### Cont....





☐ Gasa District the northern most district of the country adjoins the districts of Punakha, Thimphu and Wangdue Phodrang and with Tibet to its north.

☐ Elevations ranges 1500 to 4,500 Masl experiences extremely long

and cold winters and short but beautiful summers.

☐ Area and population: 3081.77 km² with 3,216 people



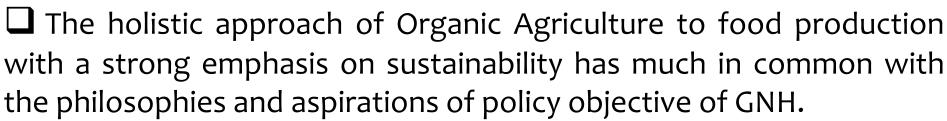
## Introduction



☐ Bhutan's development philosophy of Gross National Happiness (GNH)









☐ Accordingly, Bhutan officially launched Organic Agriculture in 2008 and proclaimed the vision to become a fully organic country by the year 2020.



- ☐ Bhutan strives to develop and promote organic farming as a way of life
- ☐ More than 95 percent of all cultivated crops are organically managed in Bhutan.
- ☐ Country has 2069 acres (NOP, 2015) under organic, Non-Wood Forest Products certification of 38558 acres (NOP, 2015).



### Introduction



☐ Gasa is one of first organic district in the country officially declared in 2004



□ District consists of four blocks where two blocks are completely depended on agriculture and remaining two blocks on livestock

farming where they herd yaks



- ☐ The district aims to be a center for organic farming in the country preserving rich culture heritage and environment
- ☐ Farmers depends heavily on indigenous and traditional farming practices



## Vision and Mission



#### **Vision**

Leader in good governance, public service delivery, green socio-economic development, tourism, culture and heritage promotion. "Good To Great Gasa" (G-3)

#### Mission

To deliver prompt, equitable and quality services towards transforming the district into green socio-economic and cultural excellence AND

Besides, district administration is determined to develop and promote organic farming and environmentally friendly farming systems as a way of life and to produce high quality and safe food, both for domestic consumption and export

## Why Gasa was declared as a first Organic District in the country?

- ☐ First Proposed by former Agriculture Ministry, Sangay Ngedup
- ☐ Subsequently, District Councils submitted by communities
- ☐ Declared as an Organic district based on following scope and potentials
- Bottom up proposal
- Clean environment
- Sustainable agriculture
- Market prospects
- Health benefits
- History of negligible synthetic chemical use





## Organically grown agriculture crops



☐ 186 households fully engaged in organic farming



☐ Practices mixed farming in an area of about 866.14 acres



☐ Farmers group formed to promote and ensure sustainable organic agriculture farming





## Cont....





Table 1 Annual Organic Commodity production (MT), 2015

<b>Sl.</b> #	Commodity	<b>Cutivated Area (acres)</b>	<b>Production (MT)</b>	Remarks
1	Paddy	135.65	165.33	Organically
2	Wheat	21.50	20.72	grown products
3	Barley	154.34	161.87	of Gasa
4	Potato	69.39	254.19	Control of
5	Vegetables	155.30	275.14	
6	Shiitake Mushroom	7002 billets	0.543	



## **Current scenario of organic Farming**



☐ Organic farming practice is not new to the people of Gasa district but the term "organic" is rather new to them.



- ☐ Initiated to adopt three strategies approaches to develop organic farming
- Sustainable poverty strategy within the district areas untouched by agro-chemicals



#### Cont....



ii. Identified selected areas which have natural potential for organic farming



iii. Commodity approach for niche products such as production of high-value-low-volume crops mainly targeted at the local and national market





#### Cont....



- ☐ Area under organic farming increased from 24-636 acres (Agriculture Survey, 2015)
- ☐ Constructed market sheds for the farmers to sell their organic products



☐ Today provided free seeds, advice and technical course on organic

farming from government

☐ The district has also initiated School Agriculture Program (SAP) within the schools which are all organic





#### **On-going Organic Agriculture farming activities**



☐ District will be soon exporting potatoes and garlic to outside countries after National Organic Certification



☐ Providing poly houses to grow crops to increase production and to produce off season vegetables

☐ Increasing area of production in converting fallow lands to arable land



#### Cont.....



- ☐ Support from National Park, electric fencing underway to control wild animals attacking agriculture crops.
- ☐ Production support

■ Market facilitation

☐ Group formation





#### **Policies of Organic Agriculture in the District**



☐ Promote Organic Agriculture and environmentally friendly farming systems as a way of life



- ☐ To make Gasa 100 percent Organic in its food production
- ☐ To attain food self-sufficiency—safe, healthy, nutritious and food diversity, environmental conservation and sustainable natural resource management in the district.





#### Way forward/ Future plans



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Providing intensive training farmers and field extension workers, field demonstrations as well as facilitation of marketing and the formation of farmers' groups and cooperative
Expand the area of organic farming through conversion of fallow lands to arable and installation of electric fencing
Initiate making use of National certification facilities
☐ Improve post-harvest packaging for organic products
Create Gasa District as a model for organic farming hub in the country
Rendering support from National Organic Program (NOP) and

Agriculture Research and Development Center in implementation and implementation of Organic Farming activities



#### **Collaborative Agencies with the District**



- □ National Organic Program (NOP), MoAF
- ☐ Horticulture Division, DoA, MoAF
- ☐ National Soil Service Center (NSSC), MoAF
- ☐ Bhutan Agriculture and Food Regulatory Authority (BAFRA), MoAF
- ☐ Department of Agriculture and Marketing Cooperatives (DAMC), MoAF
- ☐ Food Corporation of Bhutan (FCB), MoAF
- ☐ National Seed Center (NSSC), MoAF
- ☐ Bhutan Chamber of Commerce and Industries (BCCI)



#### **Issue and Challenges**



- ☐ Majority of the products are sold in domestic market due lack of certification facilities in the country and cost of marketing
- ☐ There is no premium price for being organic in Bhutan to compete with in-organic products
- ☐ Poor value addition and packaging for marketing practiced at present

☐ Little or no branding/labeling which hampers organic product popularity and marketing



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- □ Lack of bio-fertilizers and bio-pesticides to improve soil fertility and for pest and disease management.
- ☐ Cost of marketing very high specially during transportation of products
- ☐ Acute shortage farm labour hinders organic farming activities in the district
- ☐ Short growing season makes farming activities difficult

Human and wild life conflict since the district falls under National Park



#### **Conclusion**



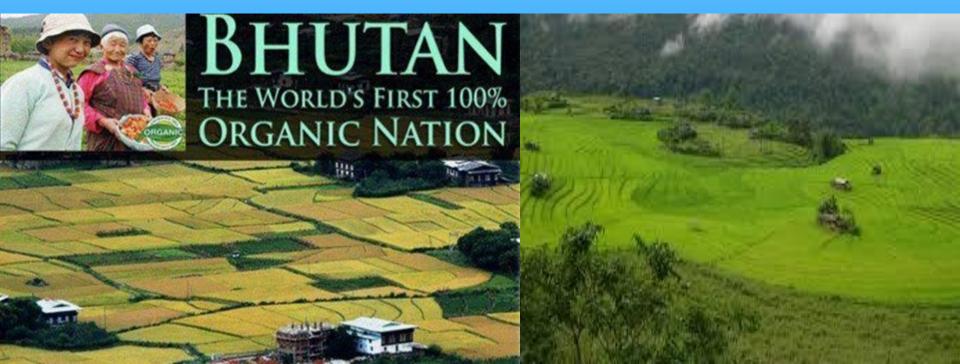
- ☐ After declaration of Gasa as an Organic District in 2004, use of agrochemical has entirely stopped
- ☐ However, it is difficult to ascertain that the district is 100 percent organic due to lack of clear pesticide and chemical regulation/monitoring in the district country.
- ☐ Support from government and community the district is gaining popularity in organic farming.
- ☐ Since tradition farming is close to organic, it makes the implementers easy to create awareness and promote organic farming within the district



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District is determined to continuously endeavor to work hard and achieve the national goal of "Bhutan becoming fully Organic by 2020" and district's vision to be "Good to Great Gasa" (G-3) with green socioeconomic development, tourism, culture and heritage promotion.



# ORGANIC FARMING IS GOOD FOR NATURE AND GOOD FOR YOU....



## THANK YOU AND TASHI DELEK