

# CONTRIBUTION OF LI-BIRD IN HORTICULTURE DEVELOPMENT IN NEPAL

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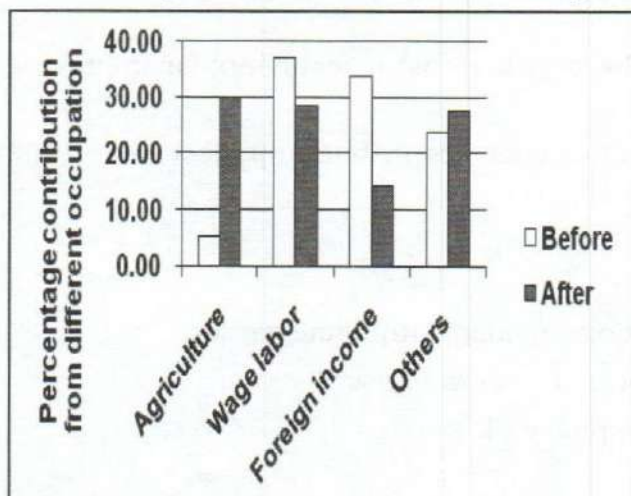
## Agriculture Innovations for Livelihood Security (AILS)

### 1. Income Generation Programme: A Case from Humla

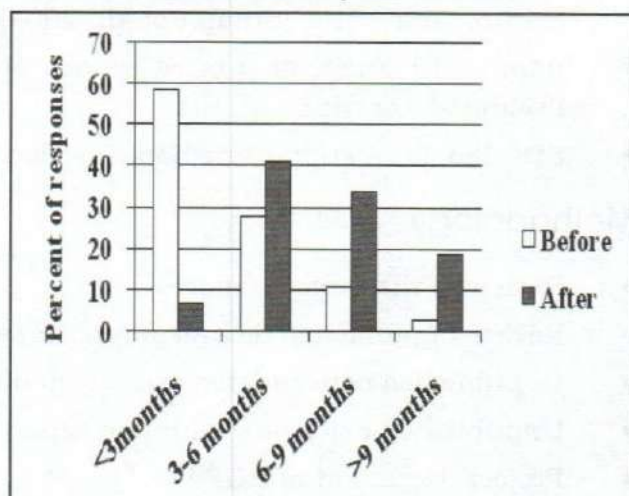
- For family nutrition and income, plastic house technology has been promoted in Humla
- This technology is extremely popular with farmers; LI-BIRD and SHIP Nepal have together promoted around 500 plastic houses

### 2. Lease based income generation for small holders and landless farmers in Nepal

Endline (1422 HHs) and Baseline (1070 HHs) surveys show there has been significant improvement in the food security and income of the resource-poor farmers

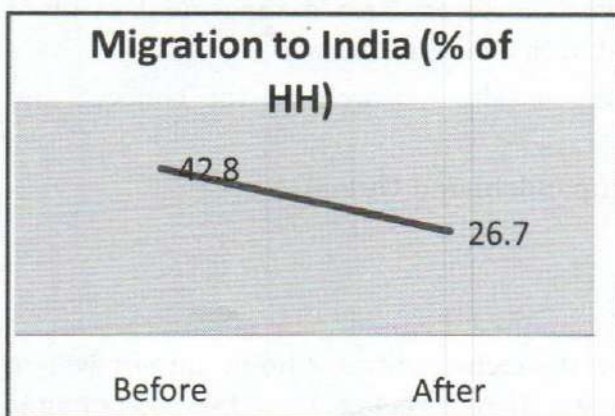


Respondents with different sources of livelihood

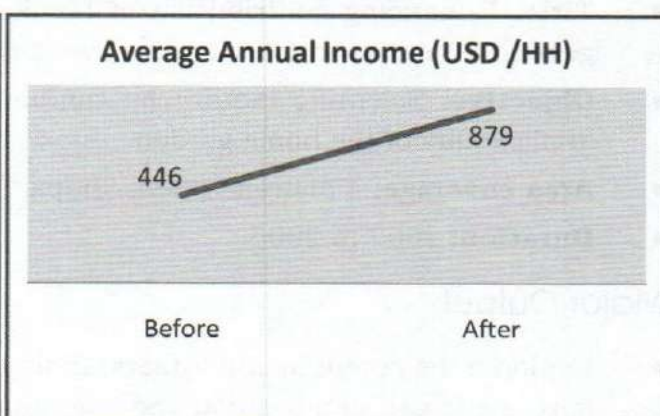


Status of food sufficiency level from own production and income of households

## Agriculture Innovations for Livelihood Security (AILS)



Impact on Seasonal Migration



Impact on Annual Income

## Current Involvement in Horticultural Commodities

- Potato
- Akabare chilli
- Vegetable type amaranths
- Beans
- Conservation of local landraces of vegetables (community based biodiversity management)

## Home Garden

A means to reach unreached for nutritional security and livelihood enhancement

- Home garden is part of subsistence farming
- Kitchen garden promotion – long efforts for food based nutrition support
- Kitchen garden is not the home garden
- **Home Garden** is: “a land use system around the homestead where several species of plants and animals are managed by the household members primarily intended for family consumption (Shrestha et al., 2004)
- Home garden and kitchen garden differ in terms of function, size, diversity, composition, features and value (Sthapit et al., 2004)
- Improved management of HG is one of the best low-cost investments for improving livelihood / nutrition status
- SDC has been supporting home garden in Nepal as a contribution project since 2002

## Methodology

- Review of the project reports
- Review of published technical reports/articles related with home garden
- Unpublished consolidated output monitoring report of Phase III
- Unpublished external evaluation report of phase III
- Project document of HGP IV

## Results

### Home Garden Project Phase I

- **Title:** Enhancing contribution of home gardens to on-farm management of plant genetic resources and to improve livelihood of Nepalese farmers
- **Objective:** Scientific inquiry by conducting on-site research on the concept and applicability of the home garden
- **Area coverage:** 4 districts (Ilam, Jhapa, Rupandehi and Gulmi)
- **Duration:** 2002 to 2005

### Major Outputs

- Explored the potential and understanding of the technicalities of home garden system (size, structure, composition and use value) in different ecological and socio-economic settings

- Home garden can be an effective means to secure family nutrition derived from diversified source of diet including animal source protein, which are grown or maintained in the garden

## Home Garden Project Phase II

- **Title:** Enhancing family nutrition and income for improved livelihoods of resource poor and disadvantaged groups through integrated home gardens in Nepal
- **Objective:** Implementing home gardens in fields
- **Area coverage:** 13 districts (Ilam, Jhapa, Rupandehi, Gulmi, Sindhupalchowk, Dolakha, Kavre, Surkhet, Baitadi, Dadeldhura, Kailali, Kanchanpur and Bardiya)
- **Duration:** 2006 to 2008

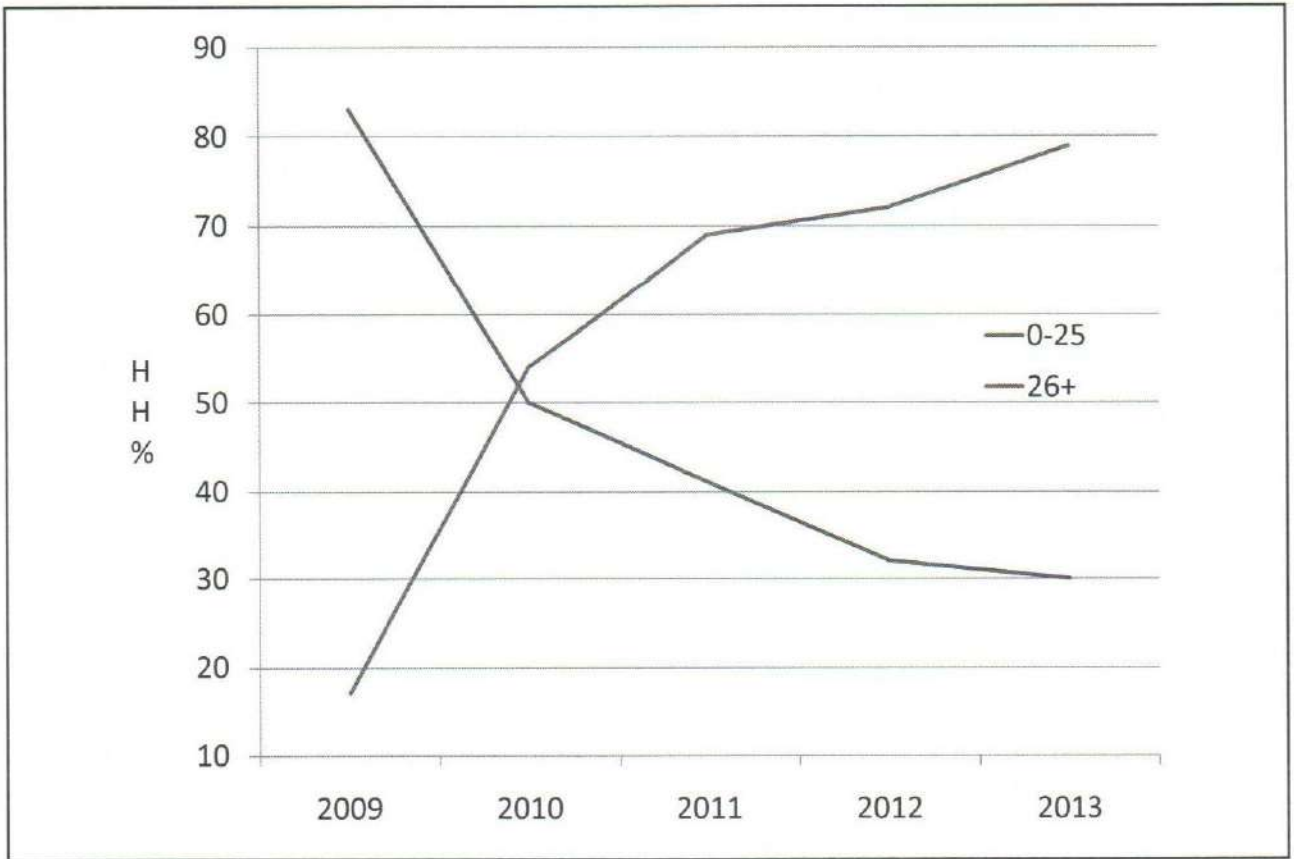
## Major Outputs

- Beneficiaries adopted HG technology and benefited from better availability of diversified dietary sources produced around the homestead
- DAGs were able to augment income by selling surplus products from their home garden within communities or at nearby local markets
- HG interventions can complement any livelihood enhancement activities targeted to resource poor HHs
- HG when implemented as stand alone programme had limited scope to generate impact at scale and deemed less cost effective

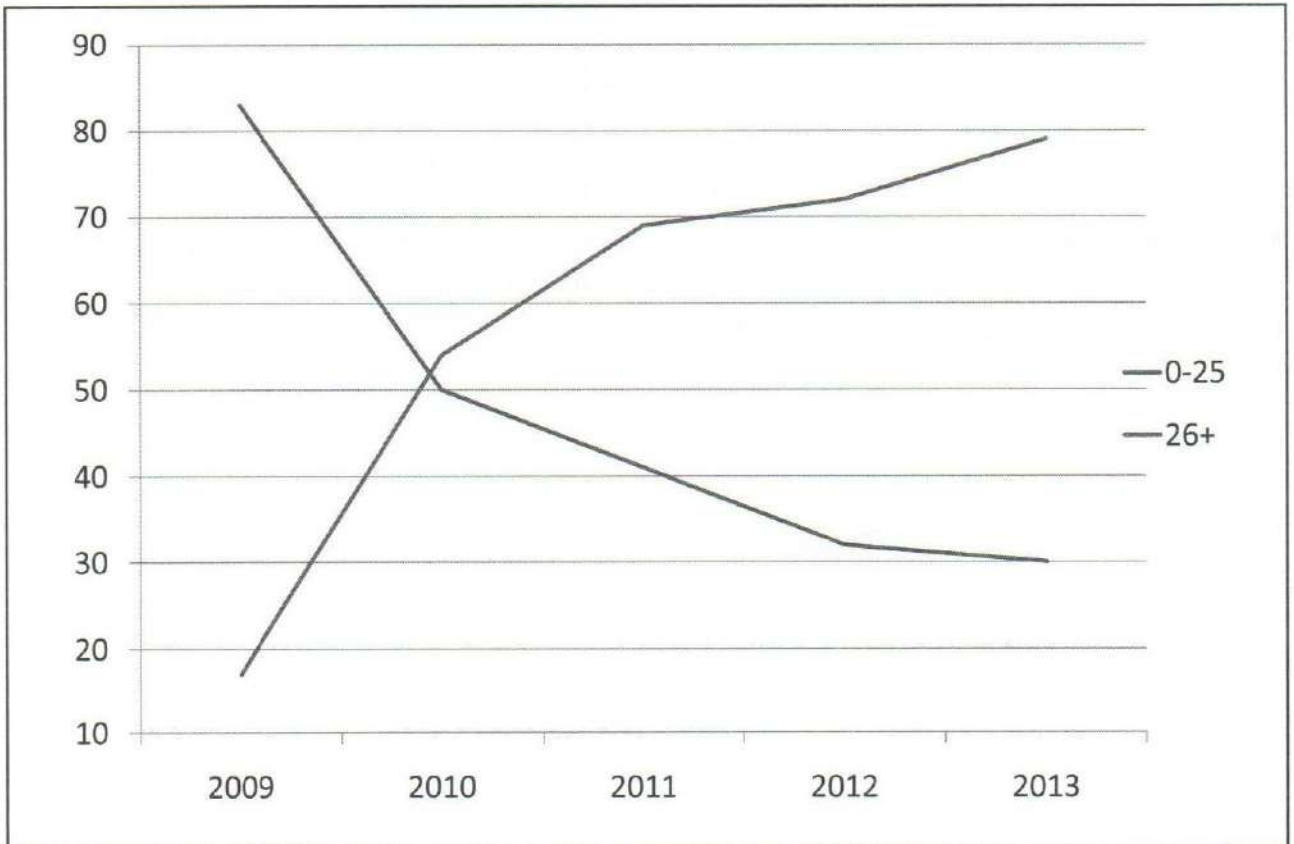
## Home Garden Project Phase III

- **Title:** Linking Home Garden in inclusive development program for contributing to securing livelihoods of resource poor and DAGs in Nepal
- **Objective:** Integrating home garden elements into other livelihood improvement programmes to strengthen such complementarities
- **Area coverage:** 16 Districts (Ilam, Jhapa, Rupandehi, Gulmi, Sindhupalchowk, Dolakha, Kavre, Surkhet, Baitadi, Dadeldhura, Kailali, Kanchanpur, Bardiya, Ramechhap, Okhaldhunga and Khotang)
- **Duration:** 2009 to 2013

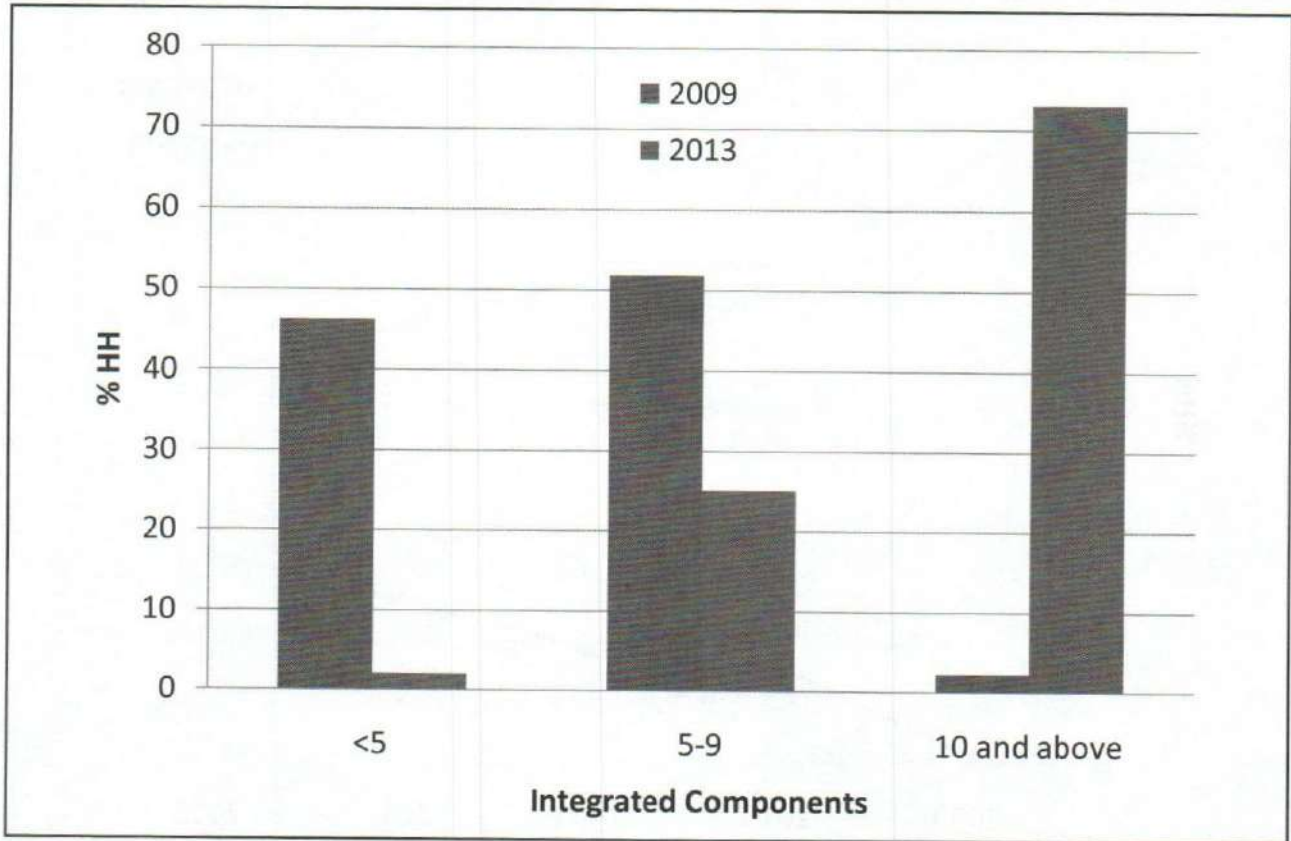
### Dietary Contribution



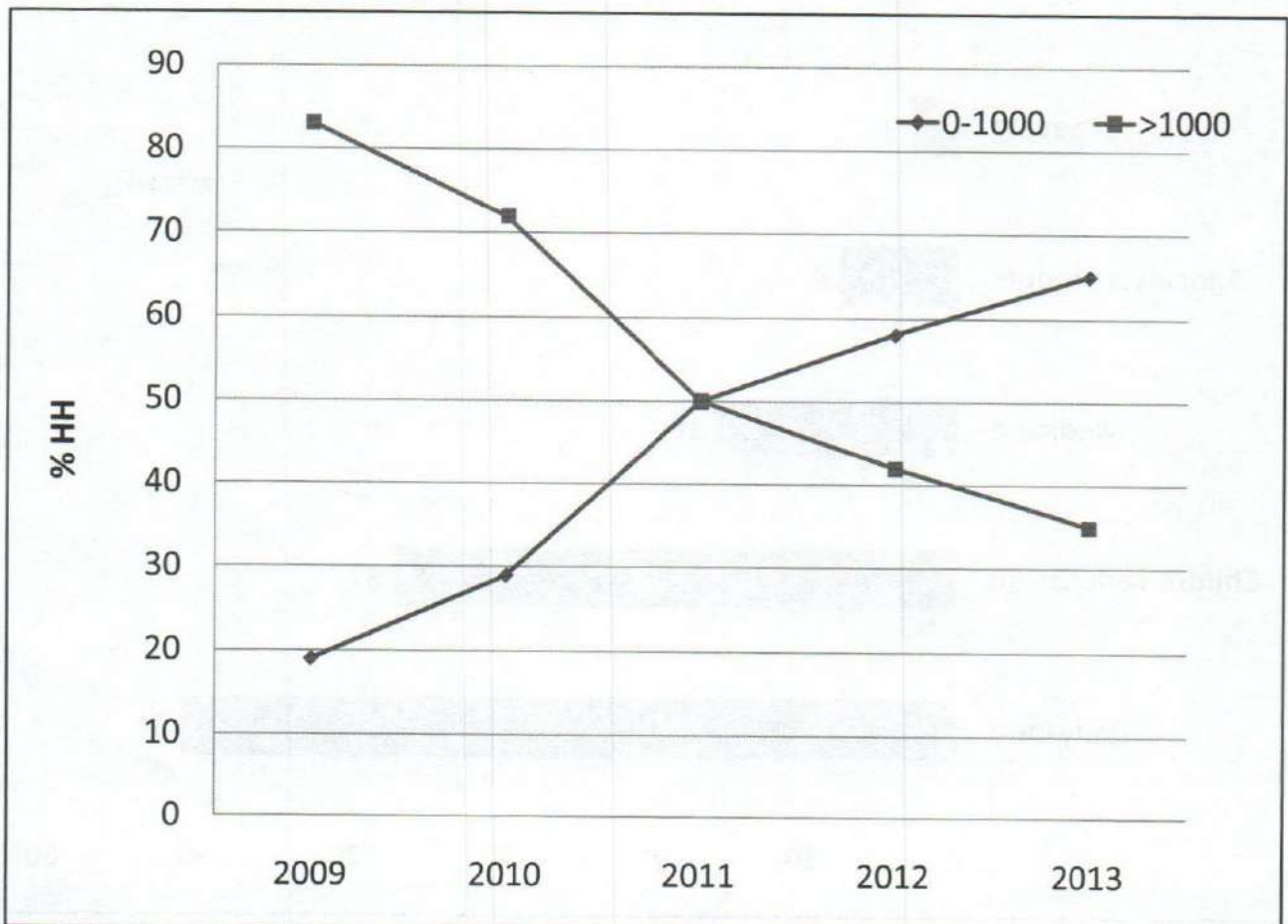
### Species Consumed



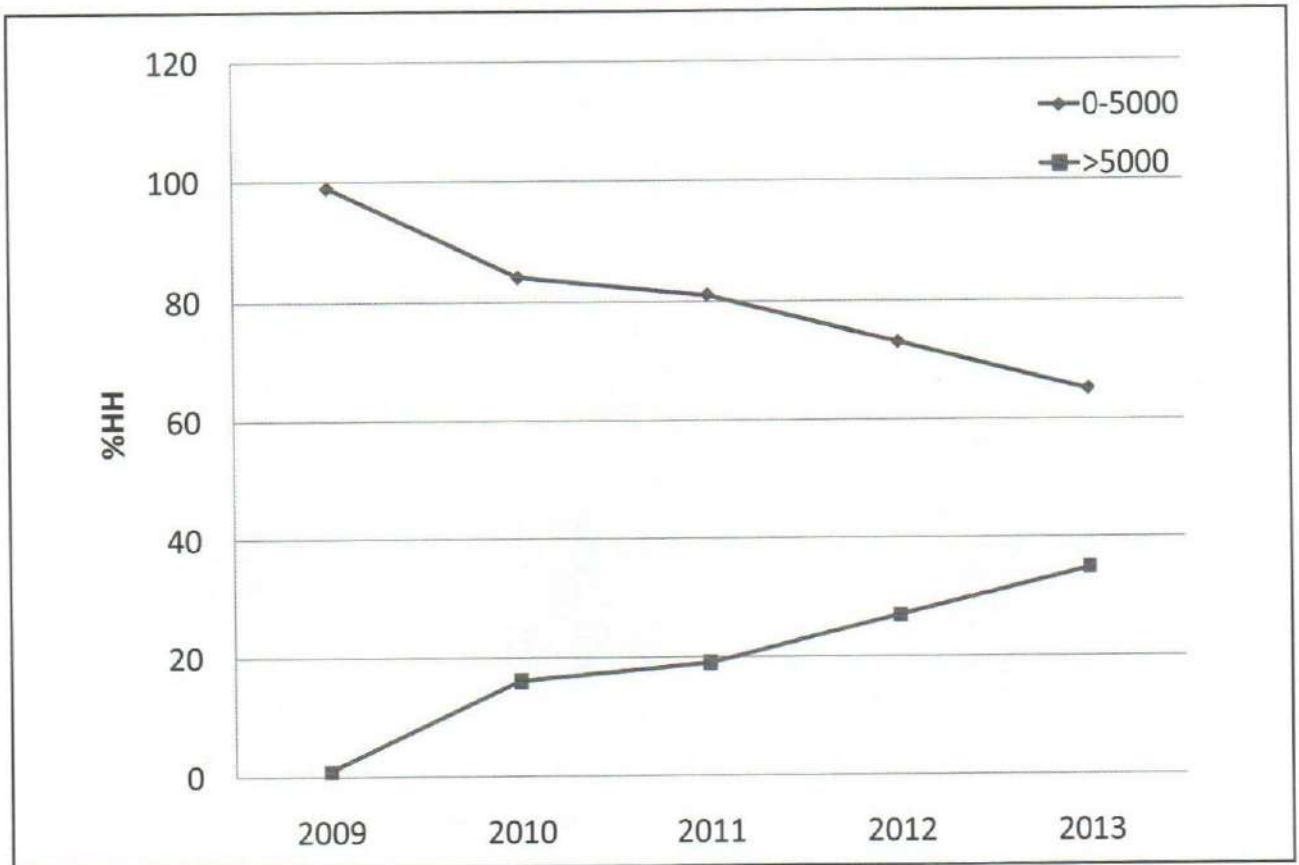
Integration of HG Components



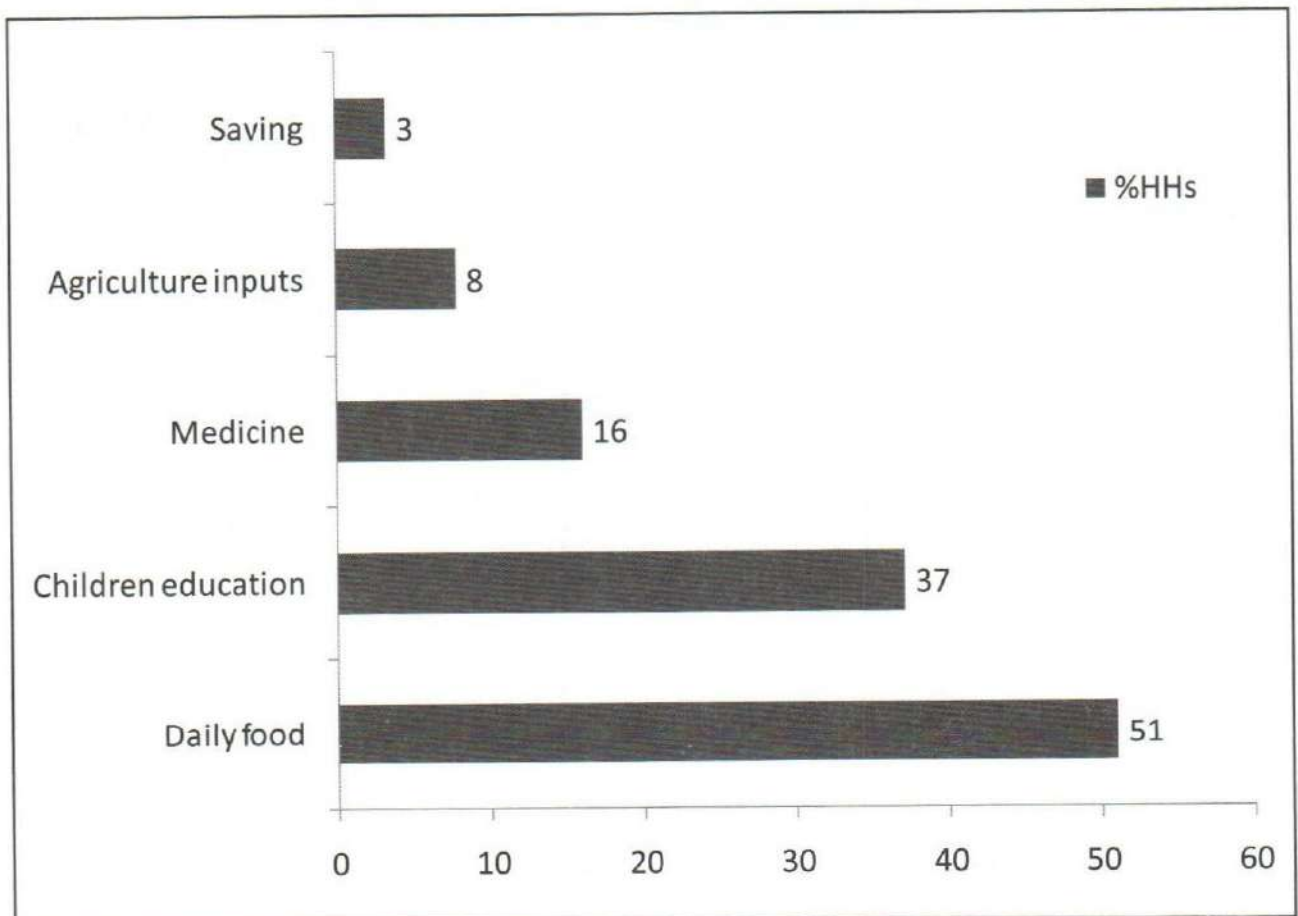
Expenditure Reduction for Vegetables/Year



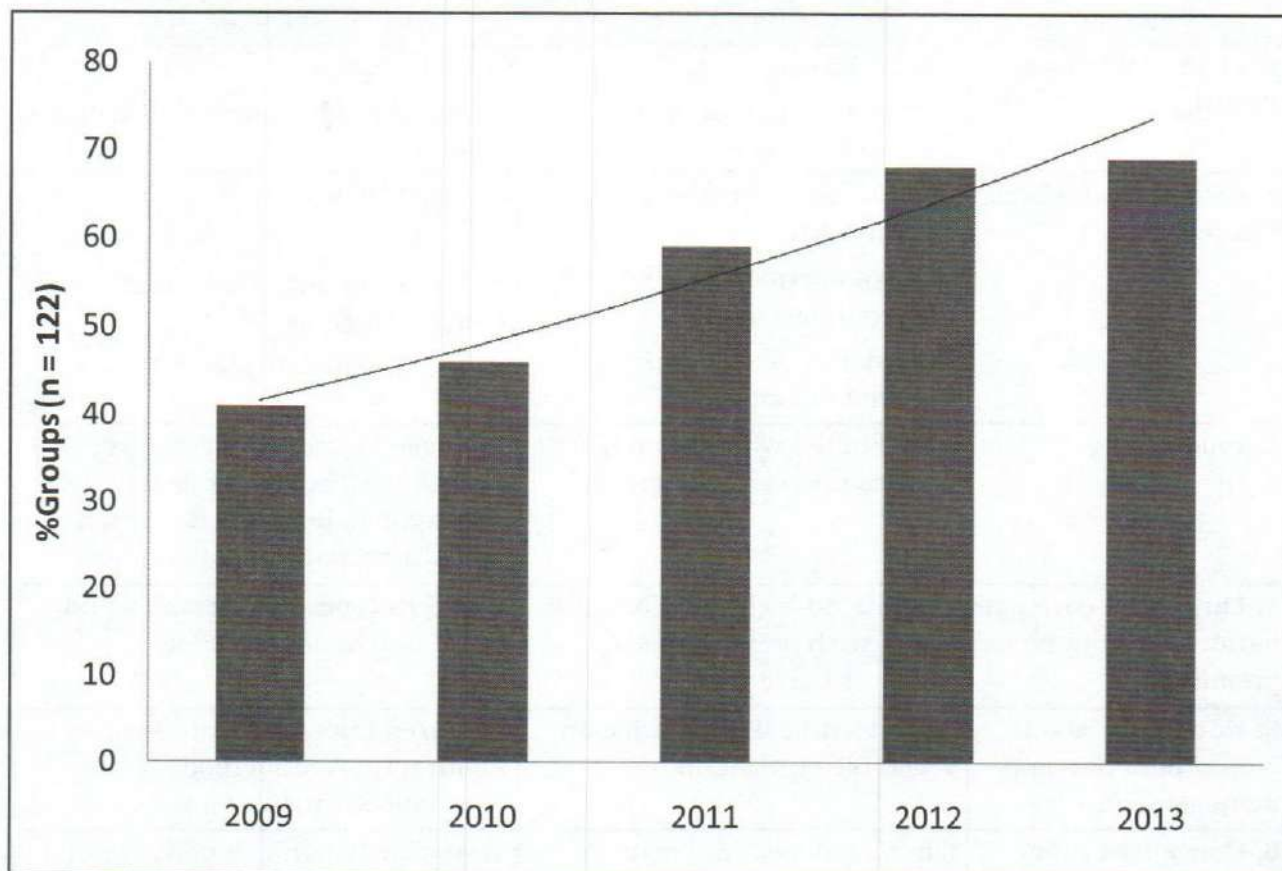
Increase in Income from HG per year



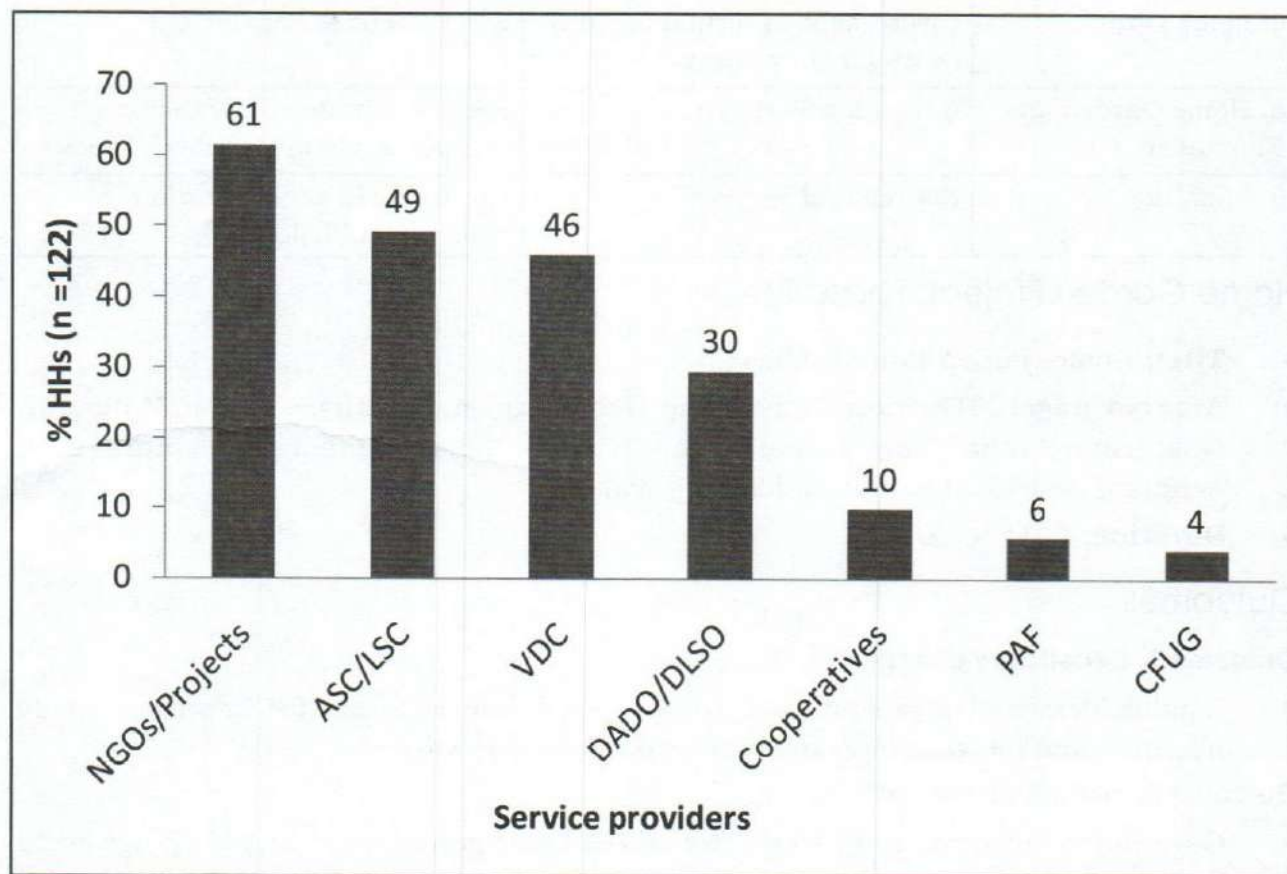
Area of Expense from HG Income



### DAG Representation in Group Executive Committee



### Accessing Service from Local Institutions



## Impression of External Evaluators

Particular	Before Project Situation	After Project Situation
1. Food & Nutrition Security	Cereal-based, Vegetables enough for < 3 months in a year	Diverse food Vegetables adequate for 12 months a year
2. Income from Home Garden	Used to buy vegetables from local markets Inadequate quantity, available only for a few months No practice of selling produce from small plots	No need to buy Sufficient quantity i.e. saved money = income) Started selling surplus
3. Biodiversity	Very limited with few crop species and varieties grown	Increased agricultural biodiversity (vegetables, fruit trees and herbs, poultry, small livestock, bees, apiculture, mushroom)
4. Land use/ coverage pattern (around home premises)	Dominated by few major staple crops such as rice, wheat, maize or barren lands	Different types of vegetables and fruits and almost covered
5. Knowledge about crop production and management	Little technical knowledge on vegetable cultivation	Acquired knowledge and skill about improved methods (vegetables, mushroom)
6. Concept of Home garden	Often confused and equated with the concept of kitchen garden	More clarity made at policy level for the purpose of implementation
7. Institutionalization of home garden	Not officially endorsed by the government as a component in development projects	Institutionalized by the government of Nepal (DoA)
8. Home Garden and Climate change	Not realized very well	Reduce climate vulnerability by increasing climate resilient species
9. Migration	Not realized very well	HG accepted as a migration resilient technology

### Home Garden Project: Phase IV

- **Title:** Home Garden Project, Phase IV
- **Area coverage:** 20 Districts (Ramechhap, Okhaldhunga, Khotang, Sindhuli, Mahottari, Dhanusha, Siraha, Dang, Rolpa, Salyan, Bardiya, Kailali, Baitadi, Dadeldhura, Doti, Achham, Dailekh, Jajarkot, Kalikot, Jumla)
- **Duration:** 2014 to 2018

### Outcomes

#### Outcome 1. Beneficiary change

- Smallholders and disadvantaged groups adopt home garden for improved family nutrition and increased income from surplus production

#### Outcome 2. Institution change

- Government agencies and NGOs internalized home garden as a targeted programme to SHDAGs for nutritional improvements