Delivering for Nutrition in South Asia

Equity and Inclusion

An Index to Select Beneficiary Households for Interventions to Alleviate Food Insecurity

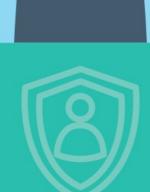


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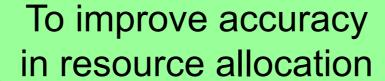
Rationale

Households with food insecurity

Government interventions



Alleviating poverty





Selection of priority households is vital

Food Insecurity Index



Method

Approach and Calculation of Food Insecurity Index

Defined the variables Literature review

- Availability
- Accessibility
- > Stability
- Utilization

Subsistence level

Accessibility

Household Dietary
Diversity Score (inverse)
Per capita monthly
income (inverse)
Share of food to total
expenditure
Dependency ratio

Ranking



Standardization



Geometric mean



Food Insecurity Index

Food security indicators given by FAO at country or regional level

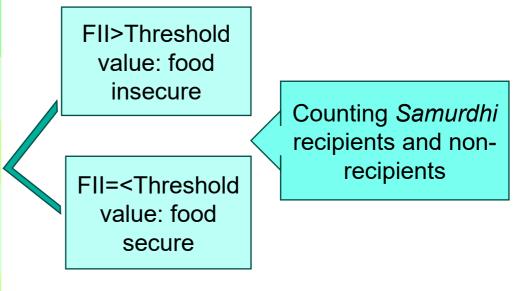


Method

Categorization of food-secure and food-insecure households and comparison with current implementation

Deriving of threshold value for Food Insecurity Index

| Measurement | Theoretical Potential Value | Reference |
|------------------------------------|-----------------------------|---|
| HDDS | 6 | HDDS scale, INDDEX Project, 2018 |
| Per capita monthly income | 15,337 LKR | Poverty line, IPS, 2019 |
| Share of food to total expenditure | 0.65 | Medium food insecure: 50-65", Smith and Subandoro, 2007 |
| Dependency ratio | 1 | Author's assumption |





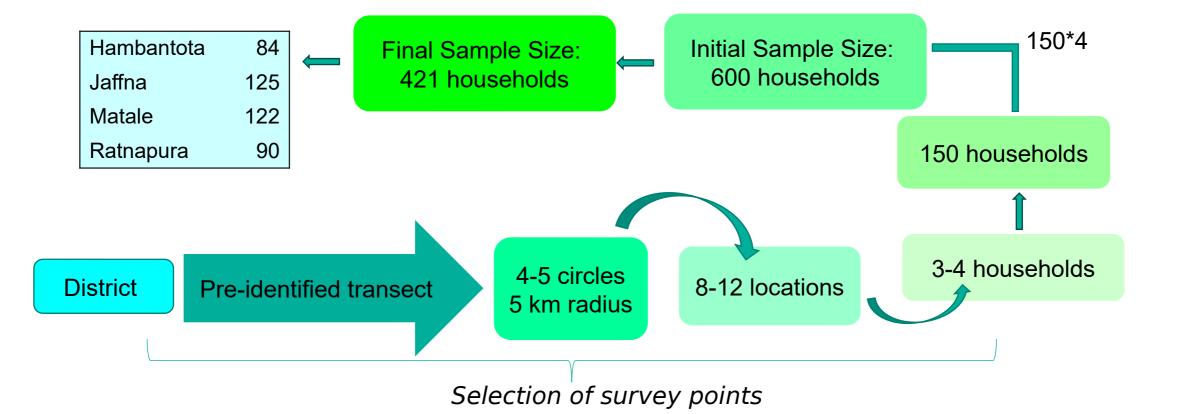
Method

Sample Selection

Data collection: Households survey

Sampling: Representation of different agro-ecological regions, climatic zones and vegetation pattern

throughout the Sri Lanka





Results

Summary of the Food Insecurity Index

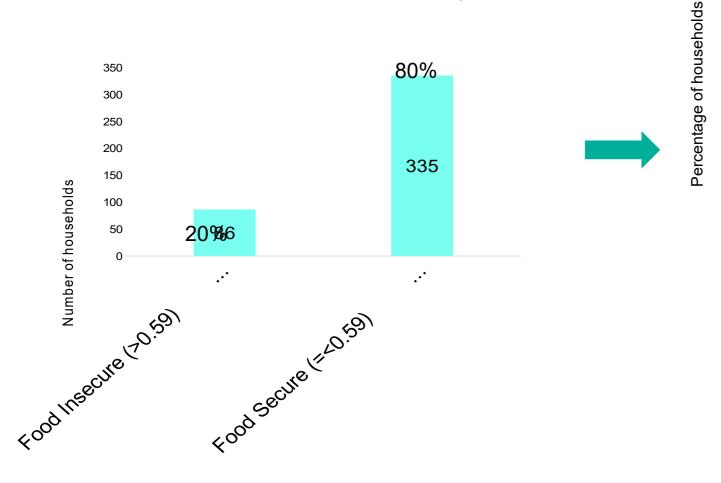
| Index | Variable | Mean ± SD | Min | Max |
|------------------------|------------------------------------|---------------|------|---------|
| Accessibility | Household Dietary Diversity Score | 8.09±1.46 | 5 | 12 |
| | Per capita monthly income (LKR) | 13,009±19,072 | 0 | 275,000 |
| | Share of food to total expenditure | 0.51±0.18 | 0.01 | 1 |
| | Dependency ratio | 0.76±0.66 | 0 | 4 |
| Food Insecurity Index* | | 0.43±0.19 | 0.05 | 0.98 |

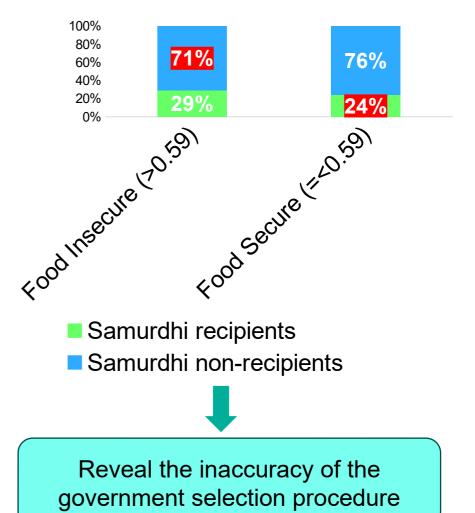
^{*}Maximum possible range: 0 - 1



Results

The threshold value of Food Insecurity Index: 0.59





Implications

Need to adopt a robust procedure in implementing national level interventions

i.e., selection of target groups for subsidies

The derived index

based on variety of predictor variables
Need to employ appropriate and easily accessible
parameters

to generalize the present approach at the ground level

Approach for enhancing household food-security

would be more effective with the appropriate

resource allocation

