

# Nutrition fragility in isolation: food insecurity in Small Islands Developing States

A mixed-methods study where the relation between food diversity, micronutrients and malnutrition status is investigated for Small Island Developing States (SIDS), combined with expert interviews that have been converted into policy recommendations.

## PROBLEM STATEMENT

- SIDS suffer from a triple burden of malnutrition.
- Sustainable Development Goals urgently requires that malnutrition decreases in upcoming years.
- Most non-communicable diseases and micronutrient deficiencies are strongly associated with diet, food intake is a key aspect to decrease malnutrition in SIDS.
- SIDS are highly dependent on food trade; low local production
- Most SIDS have unclear prevailing food policies

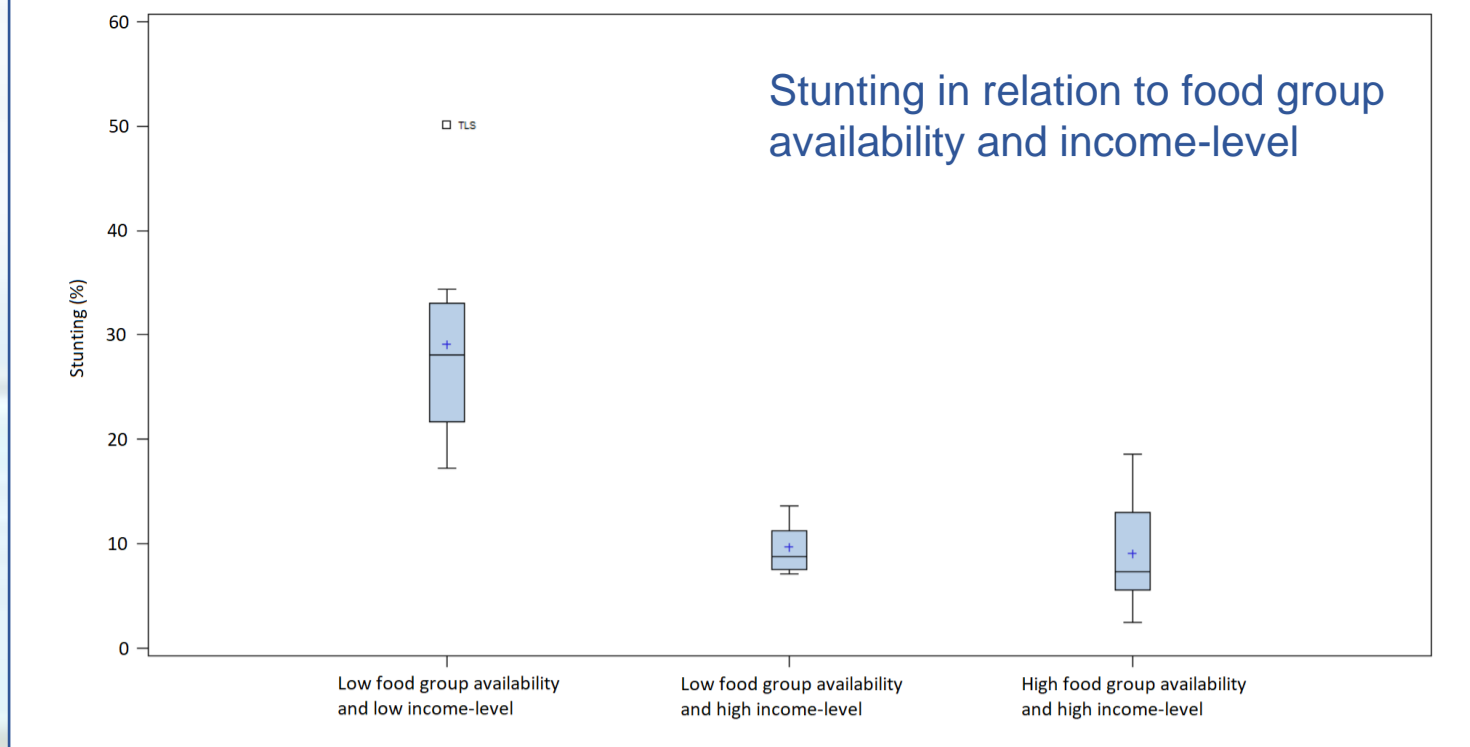
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## METHODS

- Comparing recommended daily serving for food diversity (8 food groups) and micronutrients (15) in relation to malnutrition status (stunting, wasting, BMI) by SIDS and income-level (low, lower middle, upper middle, high)  
 Source: FAOSTAT food balance sheets, UNDESA, RIVM Nevo, WHO, UNICEF.
- Policy oriented interviews with international experts of the FAO and IFAD, on food and nutrition programmes in SIDS.

## RESULTS

- Food groups which show major shortages (percentage SIDS):
  - Meat, eggs and fish (23%)
  - Vegetables (27%)
  - Legumes, peas, nuts and seeds (47%)
- Micronutrients which show major shortages (percentages SIDS):
  - Folate (7%)
  - Iodine (10%)
  - Vitamin A (13%)
  - Vitamin K (33%)
- A cross country regression between available iron in relation to anaemia showed a positive relation between these indicators.
- Trade dependency and cultural preference play a major role in persistency of diet patterns



## DISCUSSION & CONCLUSION

- Reflection on key findings**
- Shortages in micronutrients and/or food groups prevail in all SIDS.
  - Food group availability and income-level in relation to stunting shows a significant difference compared to high income-levels.
  - National averages on food diversity and micronutrients
    - Provide an overall indication
    - Is faster and more cost effective than household surveys
  - Food Balance Sheets show a close correlation with national representative data (Schmidhuber et al. 2018)
  - This analysis is helpful for programmes to redress deficiencies
  - Availability does not signify access for everyone
- Strengths and limitations**
- + International experts of the FAO and IFAD verified the data
  - Mean indicators flatten out extremities

## POLICY RECOMMENDATIONS

- Awareness on healthy food and healthy diet patterns
- Involve local people in every phase, not only with implementation
- Take cultural preferences into account, they are persistent
- Support and stimulate local production, e.g. hydroponics
- Actual implementation of policies
- Improving infrastructure: within country transport

