# Haiti Hurricane Matthew Bean Seed Relief Effort

## Lessons Learned and Recommendations for Future Similar Situations

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**Feed the Future Innovation Lab for Collaborative Research on Grain Legumes**
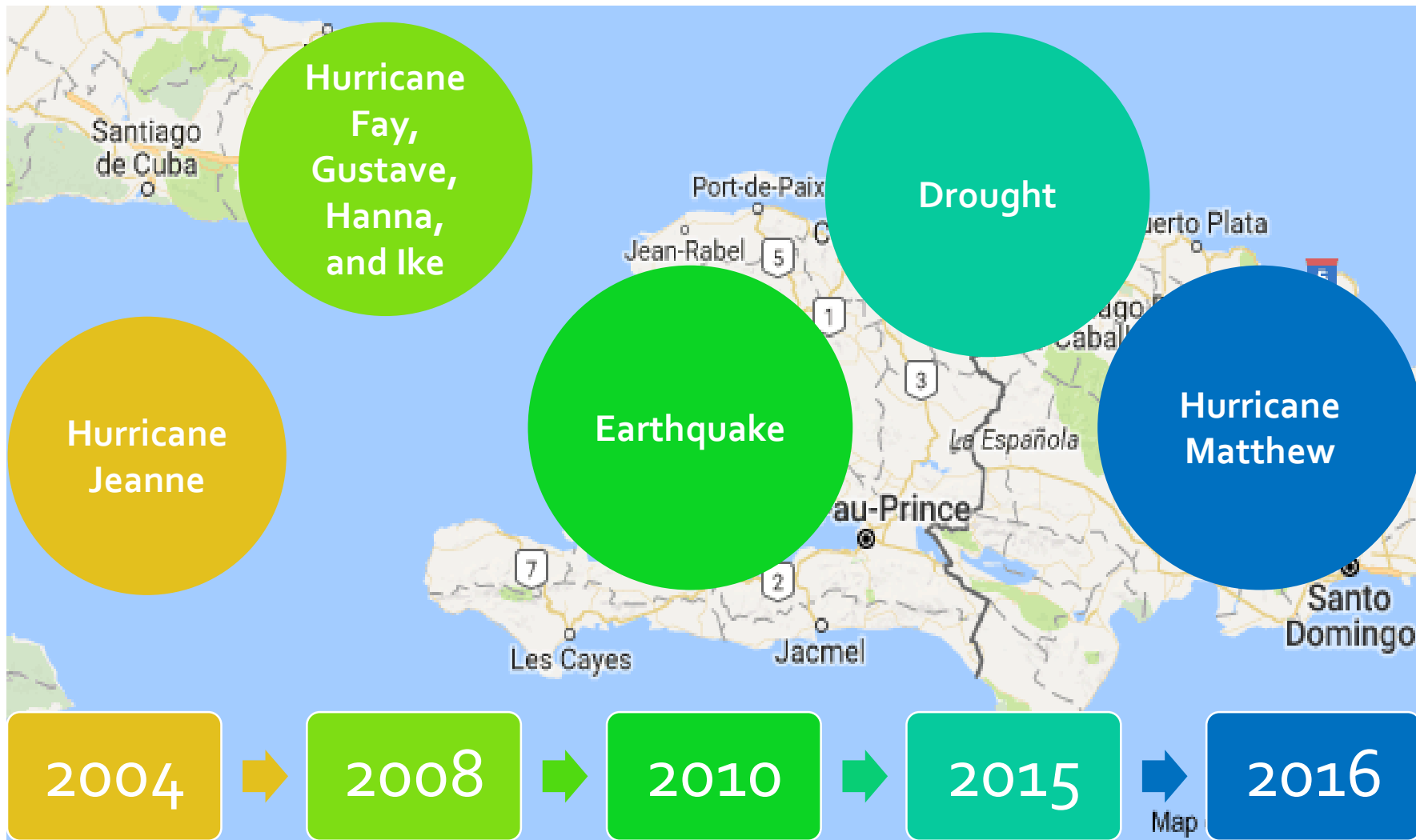
# Presentation Outline

1. Haiti's Proneness to Natural Disaster
2. MGP's Zones of Intervention
3. Project Description
4. Project's Outcomes
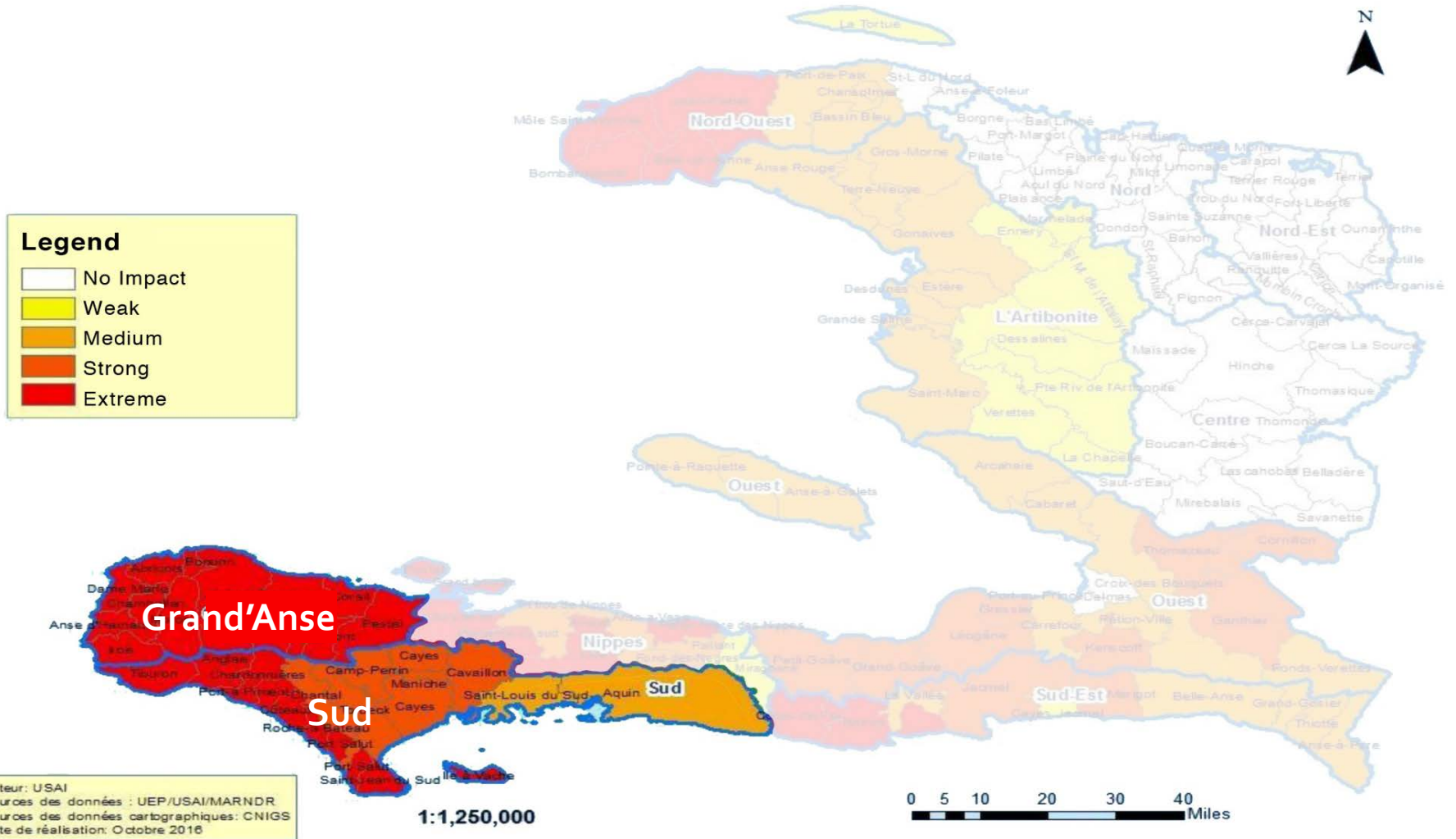5. Lessons Learned
6. Conclusions
7. Recommendations

*Feed the Future Innovation Lab for Collaborative Research on Grain Legumes*

FEED THE FUTURE
The U.S. Government's Global Hunger & Food Security Initiative

# Haiti's Proneness to Natural Disaster

# MGP Zones of Intervention



**Legend**
- No Impact
- Weak
- Medium
- Strong
- Extreme

Grand'Anse

Sud

Auteur: USAI
Sources des données : UEP/USAI/MARNDR
Sources des données cartographiques: CNIGS
Date de réalisation: Octobre 2016

1:1,250,000
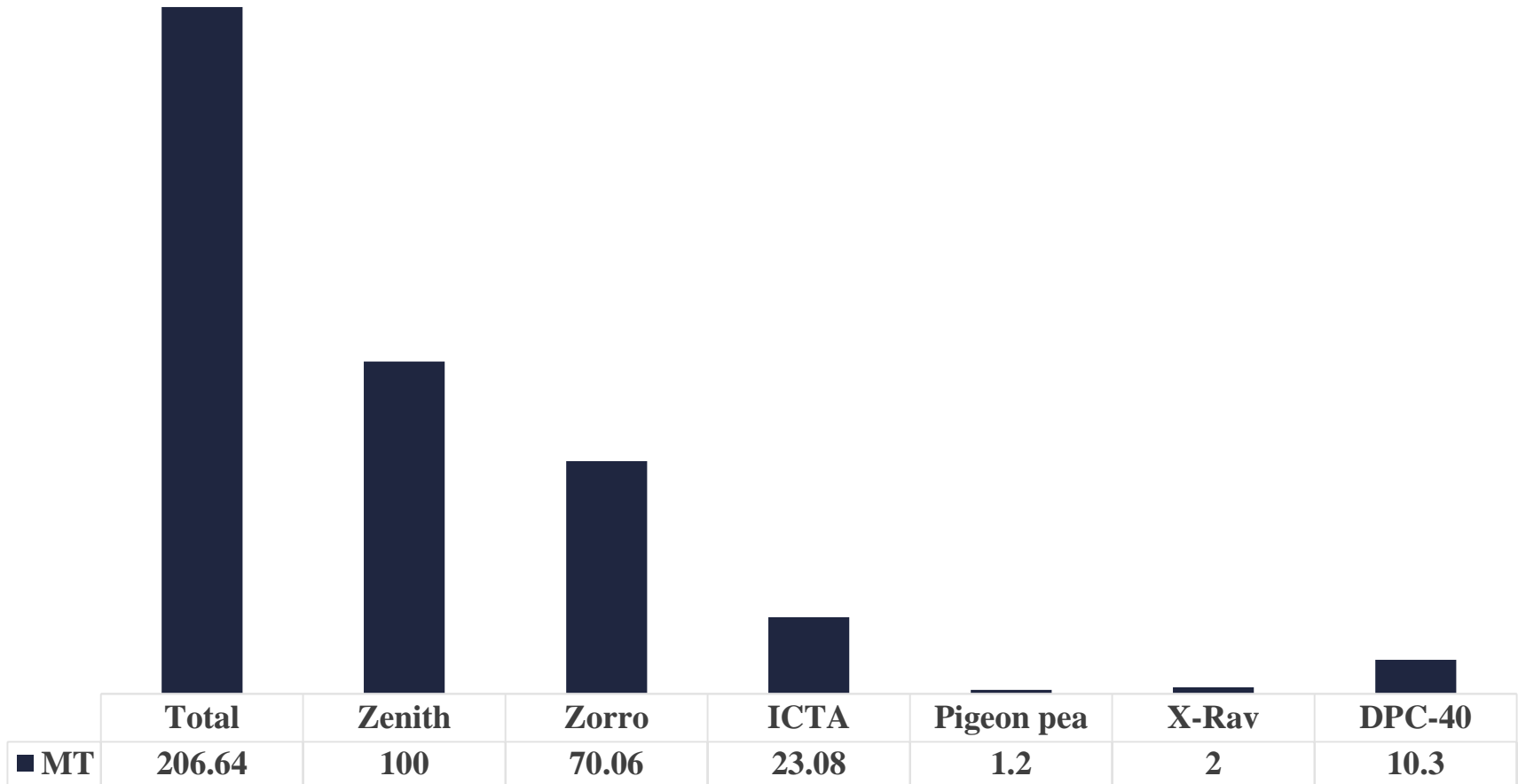
0   5   10    20    30    40 Miles

# Project Description

- Distribute quality seed of improved varieties of black bean and pigeon pea to farmers in the southwestern region of Haiti who were considerably affected by the hurricane Matthew.

- Seek to improve household's level of food and nutritional security.

- Re-establish agriculture production capacities, and to contribute to sustainable bean production for household consumption during this season and into the future.

# Project's Outcomes

## 206.64 MT of Seed Distributed



| MT | Total | Zenith | Zorro | ICTA | Pigeon pea | X-Rav | DPC-40 |
|---|---|---|---|---|---|---|---|
| | 206.64 | 100 | 70.06 | 23.08 | 1.2 | 2 | 10.3 |

# Project's Outcomes

## More than 11,000 households received MGP seed

# Project's Outcomes

## 4,242 hectares have been planted with black bean and pigeon pea

# Lessons Learned

## 1-Access to reliable agricultural information is crucial for crops success

**Planting season**       **Soil fertility**          **Rainfall pattern**
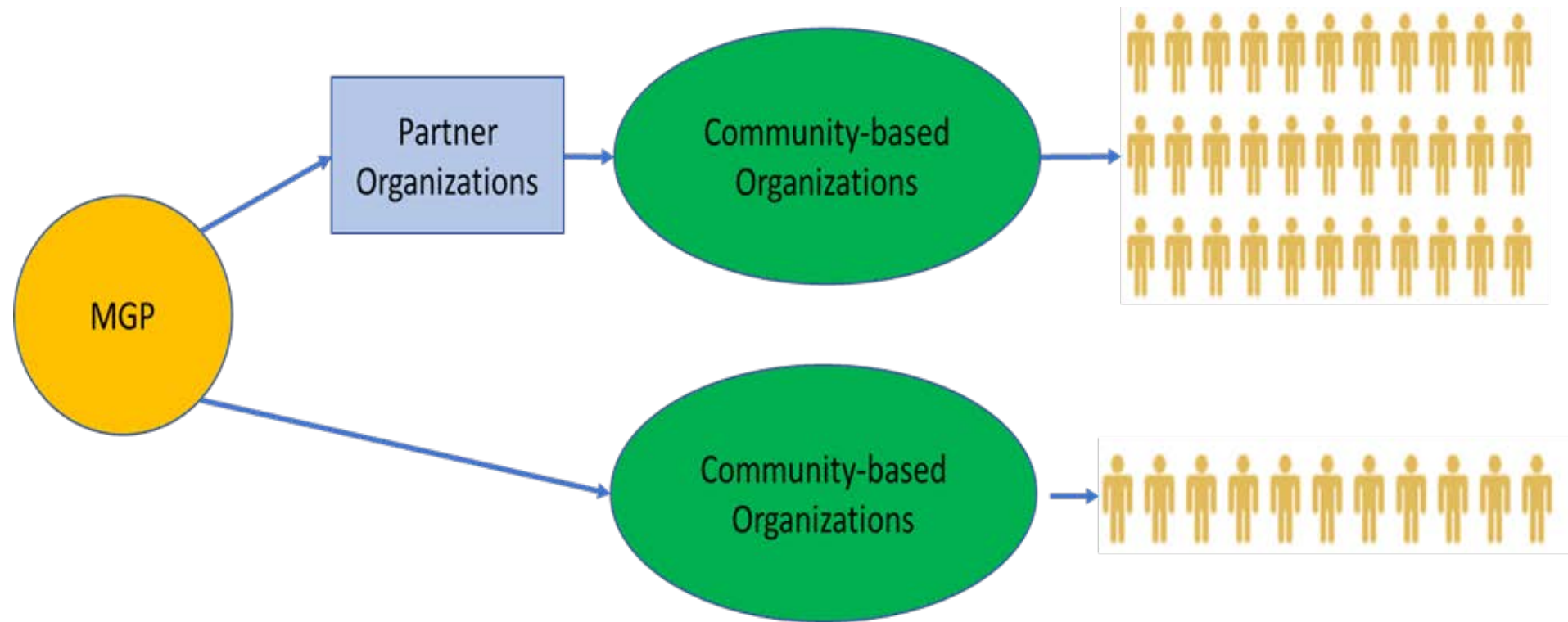
**Temperature regimes**       **Diseases incidence**

**Variety trials**

**Risk analysis**

# Lessons Learned

## 2- Strategic relationship is a key component for success in a relief effort

# Lessons Learned

*3-The provision of technical assistance is as important as providing high quality seed*

# Conclusions

This experience has shown that:

- Access to high quality seed contributes to strengthen communities' resilience to return swiftly to produce their own food in a short period of time.

- Strategic collaboration has the potential to reinforce organizational capacity of grassroots organization.

- Haiti is still dependent on other countries to source seed in emergency situations

# Recommendations to increase preparedness for similar situations

- Prioritize high quality bean seed with short growing cycles.

-  Bring varieties with built-in disease resistance (particularly against golden mosaic virus).

- Provide a complete package (seed + appropriate technologies) to maximize production.

# THANK YOU! MÈSI!

# Annex

# Haiti's Proneness to Natural Disaster

# Training topics

- Soil conservation techniques such as design and use of contour lines in hillside agriculture,
- Germination test,
- Agronomic traits of creole and improved varieties,
- Seed and grain production,
- Soil pH and plant nutrition,
- Organic fertilization,
- Bean harvest and post-harvest techniques,
- Use of GrainPro bags for seed and grain storage,
- Importance of farm record book

# Sud and Grand'Anse

| Department | Size/Km² | % | Cultivable land/Ha | Agroforestry/Ha |
|---|---|---|---|---|
| Sud | 2,649 | 45.8 | 111,461 | 40,955 |
| Nippes | 1,226 | 21.2 | 85,997 | 11,473 |
| Grand'Anse | 1,914 | 33.1 | 37,863 | 85,334 |
| **Total** | **5,789** | **100** | **235,321** | **137,762** |

**Population**

**Sud:** 774,976
**Grand'Anse:** 468,301
**Nippes:** 342,325

# Why bean?

According to FAO, "beans are nearly the perfect food" because they are rich in nutrients, protein, folic acid, dietary fiber and complex carbohydrates. Consumption of a single serving of bean can supply the body between 23%-30% of iron.

Common bean (*Phaseolus vulgaris*) is the most important grain legume cultivated in Haiti and represents 60 percent of Haiti's total legume production. Pigeon pea (*Cajanus cajan*) arrives in second position with 26 percent; cowpea (*Vigna unguiculata*) and lima bean (*Phaseolus lunatus*) represent 8.3 and 4.4 percent, respectively. In 2015, the production of common bean was estimated at 83,775MT while pigeon pea was 54,184MT.

Grand'Anse and Sud together produce 17 percent of the total bean cultivated in the country.The number of smallholder farmers producing bean in both departments is estimated at 75,764. The size of household farms varies from 0.06 to 1 hectare. The southwestern regions are characterized by three bean-planting seasons: spring (January-February), summer (July-August), and winter (November-December); 69 percent of common bean and 73 percent of pigeon pea are planted during the first season. Bean and pigeon pea produced under mono-cropping systems represent only 15 and 4 percent, respectively.

# Altitude

# Vulnerability to erosion



Carte 6: RISQUE D'ÉROSION