



Global Agricultural Insurance for All (GAIA)

Using parametric insurance to tap previously unreachable markets and protect some of the world's most vulnerable farmers from the impacts of Climate Change

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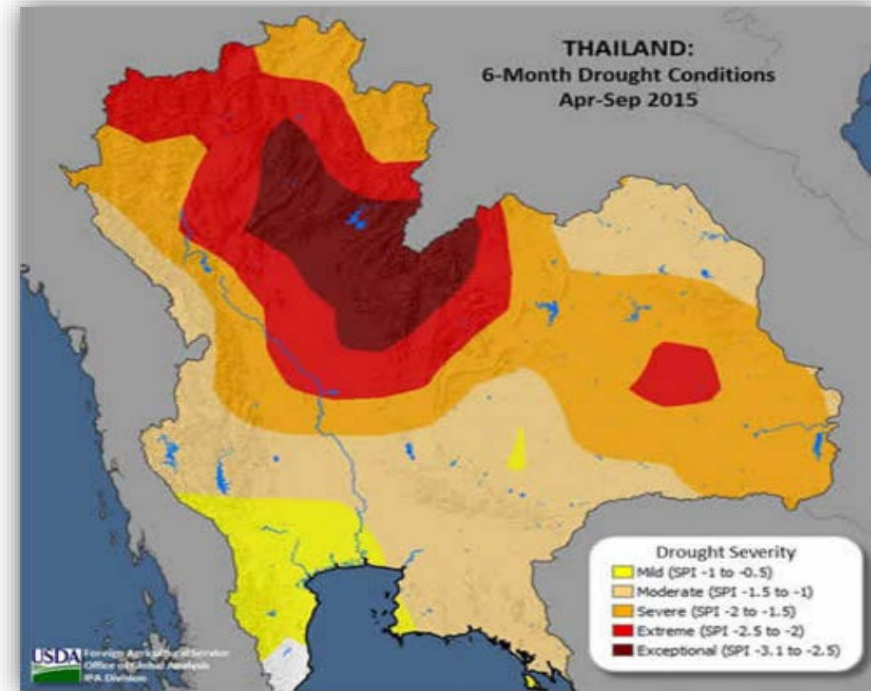


The Problem: Drought and Climate Change

- 2014 - 2015 droughts in Thailand
- 9-12% decline in rice yield
- \$1.2 billion in damages borne by farmers and businesses



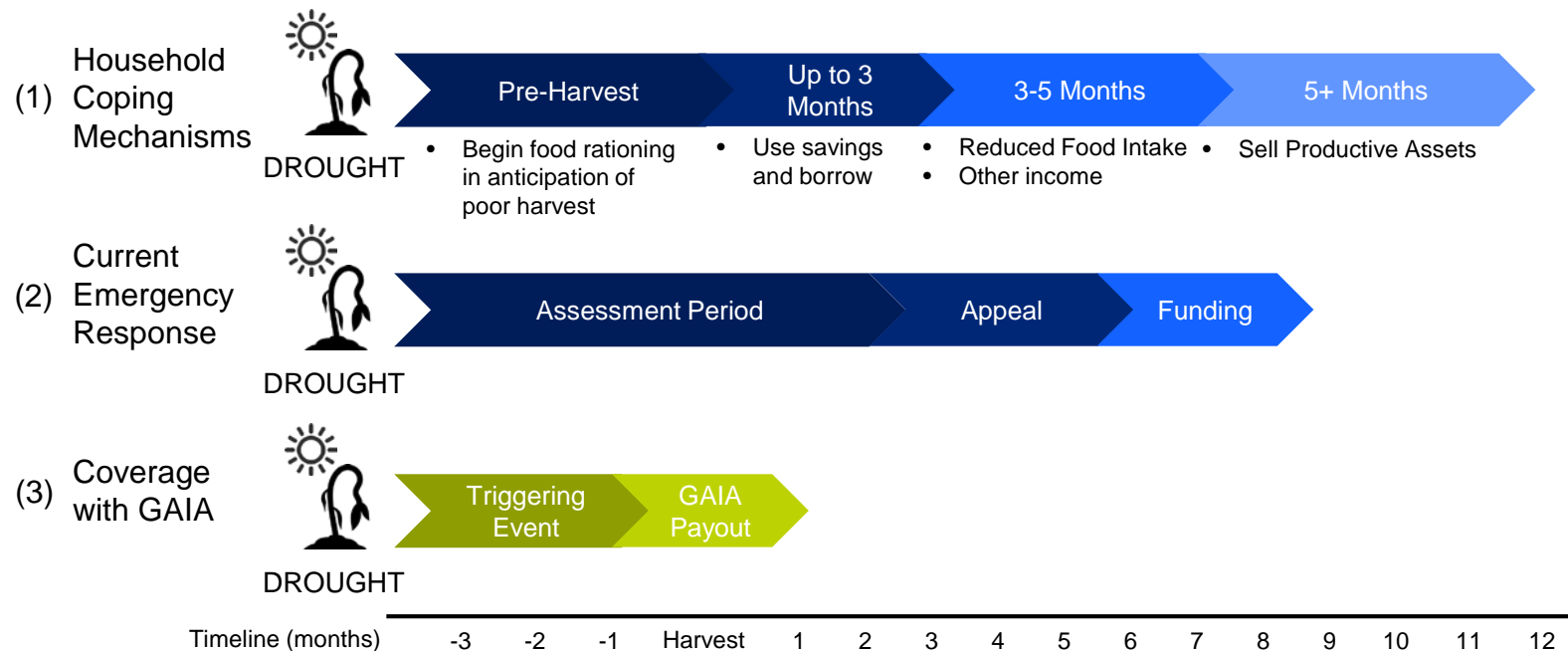
Source: <http://www.bloomberg.com/news/articles/2015-07-08/thai-drought-pits-soldiers-against-farmers-flouting-water-curbs>



The Solution: Weather Index Insurance

1. Allows for quick disbursement of critically needed funds
2. Offers affordable premiums that accurately cover losses
3. Enhances farmer resilience and macroeconomic stability

Response Timeline from Drought for Farmers



Why Thailand?

Rank	Country	Market Size Score	Ease of Doing Business	CC Risk Score	Weighted Score
1	Australia	1.3	0.4	0.60	0.8
2	Thailand	0.8	1.3	0.43	0.8
3	China	0.7	2.1	0.08	1.0
4	United States	0.6	0.2	2.18	1.0
5	Spain	1.1	0.9	1.53	1.2
6	Korea, Rep.	0.9	0.1	2.70	1.2
7	India	0.3	3.3	0.38	1.3











- Over 80% of rice farmers (10 million farmers) depend on rain-fed irrigation¹
- Estimated rice insurance market value of \$800 million annually¹



1: Own analysis using World Bank, FAO, and Int'l Rice Research Institute



Social Impact

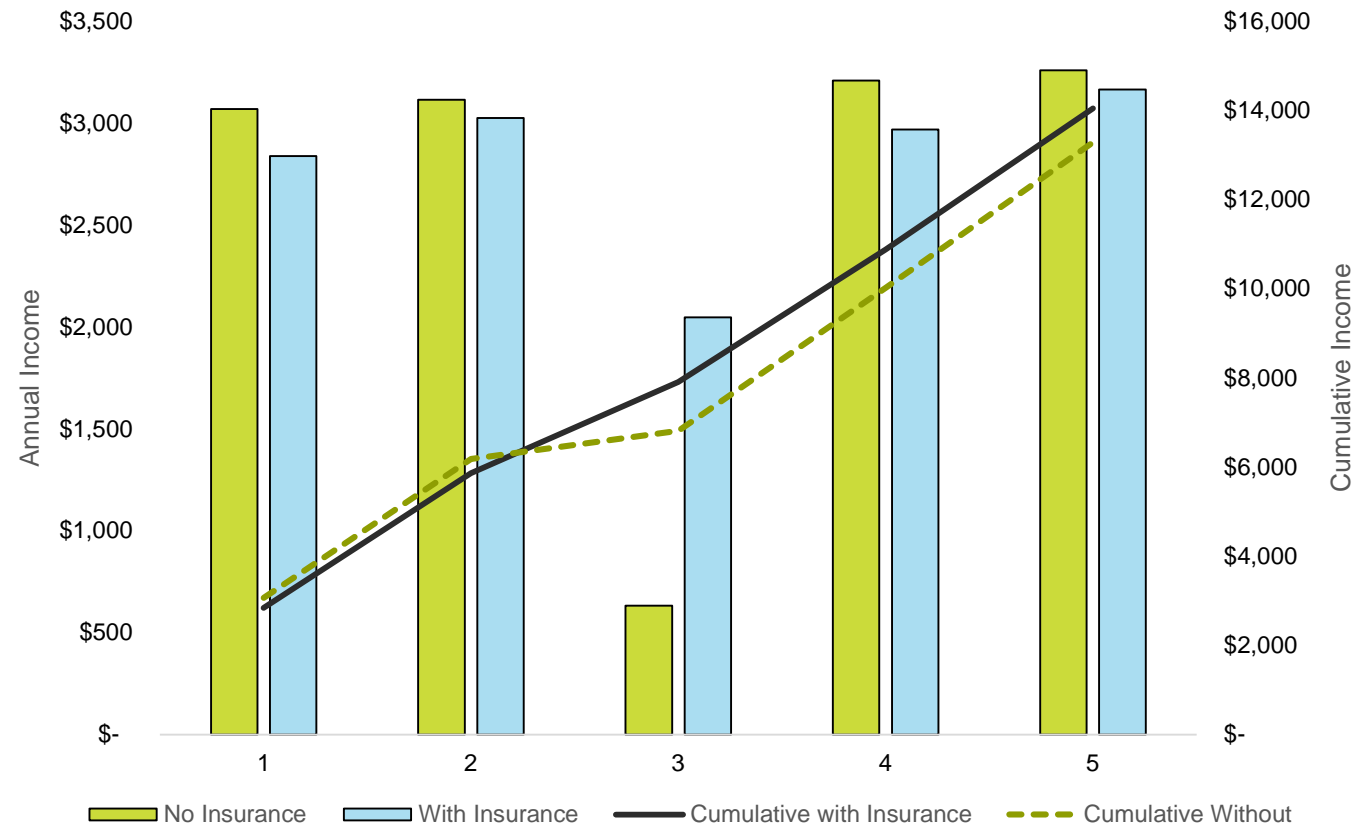
Impact	Econ	Social	Environ
Reduce annual income volatility for rice farmers			
Early warning food shortage detection			
Greater income security for farmers			
Reduce farmers' incentive to exploit environmental resources in drought years			
Improve farmer awareness of financial services			
Reduce volatility of overall Thai economy			

Measuring Impact:

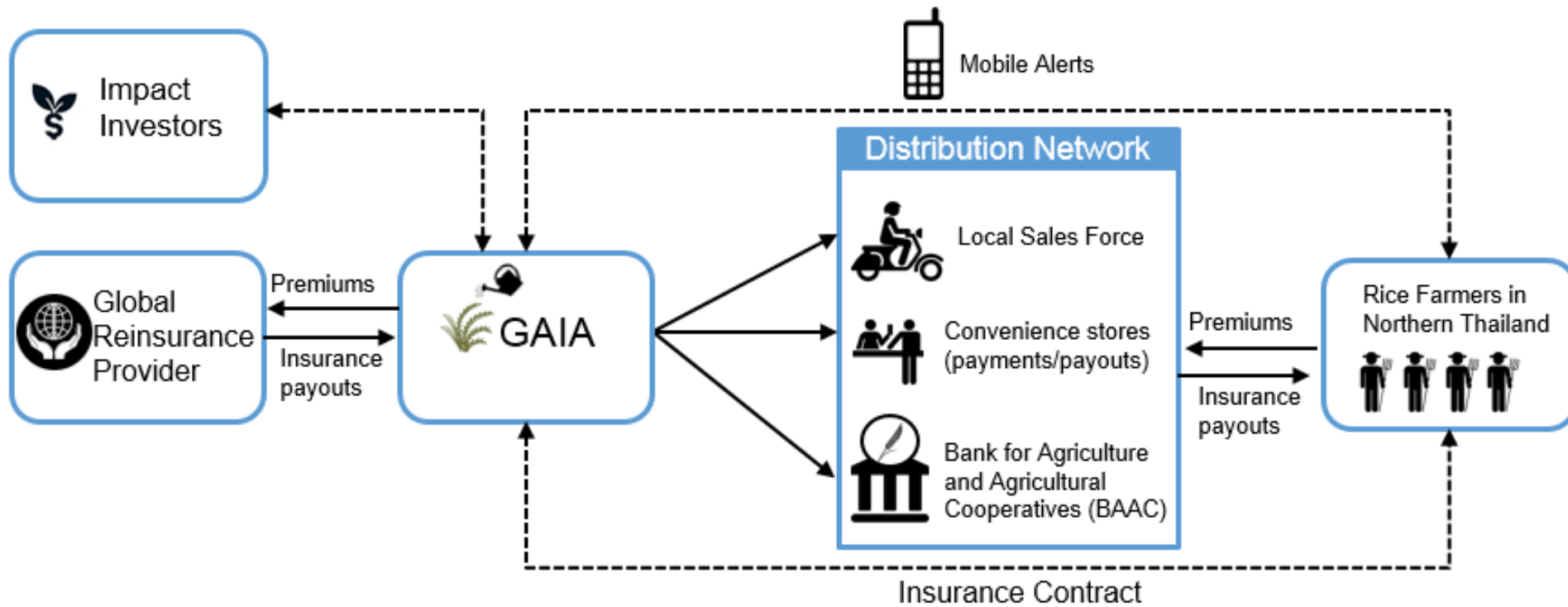
- Number of farmers with insurance that reduces their income volatility
- Reduction in number of farmer defaults on agricultural loans
- Number of farmers with first time insurance



Thai Farmer Net Income Comparison: With 50% Insurance vs. Without Insurance



Investment Model



Timeline

	Phase 1		Phase 2								
	Proving the Model \$5M		Full-Implementation Rollout \$20M								
	1	2	3	4	5	6	7	8	9	10	Exit
Market Feasibility and Partnerships	Market Demand Survey										
	Partner with BAAC		Bundling of Weather Index Insurance with BAAC agricultural loans								
Insurance	Actuarial Study	Reinsurance RFP	Purchase of Reinsurance								
		Contract Design					Risk diversification: additional product offerings				
Distribution			Sales Force Training / Local Farmer Outreach				200,000 farms		300,000 farms		
		5,000 farm "dry run"	Build distributed payout system								
	Bangkok Office		Regional Office Buildout								

Financial Projections

Cash Flow Projections (US\$ Millions)



- **Fund Size:** USD \$25 million
- **Asset Class:** Private Equity
- **Investors:** Impact investors
- **Target IRR:** 13-20%
- **Time Horizon:** 10 years
- **Tranche 1:** \$5 Million Funding
- **Tranche 2:** \$20 Million Funding
- **Incentives:** 5% equity, 1% sales



Risk Mitigation

Terminal Value Growth Rate

		4%	6%	8%	10%	12%
Revenue (% of base case)	44%	10.0%	11.5%	13.0%	14.5%	16.1%
	67%	11.9%	13.2%	14.6%	16.1%	17.6%
	100%	14.0%	15.3%	16.6%	18.0%	19.3%
	133%	15.8%	17.0%	18.2%	19.5%	20.8%
	178%	17.7%	18.8%	20.0%	21.2%	22.5%

Low Farmer Uptake

High Reinsurance Premiums

Basis Risk

Conclusion

1) Weather Index Insurance is Scalable:

Proven model in Africa & India. Improved response time to droughts and lower operating expenses

2) 10 million rice farmers in Thailand:

Vulnerable population with estimated \$800 million drought insurance market for rice

3) Innovative financial mechanism:

Enhances climate change adaptation that reduces income volatility risk



Financial Impact: 13%-20% IRR

Social Impact: 1.1 million farmers protected annually

Thank you

Meet the GAIA Team



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