

Crop Insurance Performance in Japan: Some Preliminary Observations

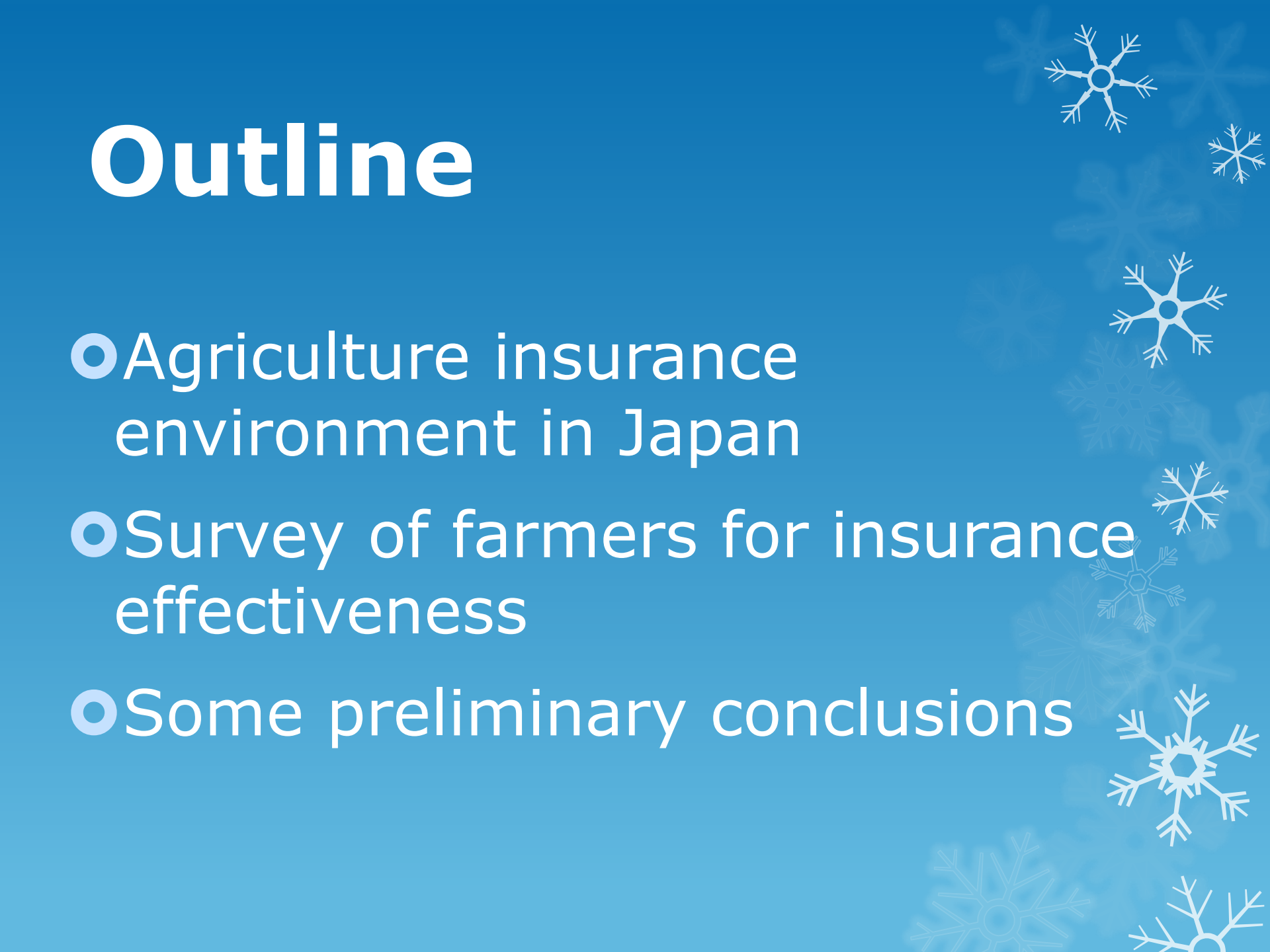


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Effectiveness of Insurance: Challenges and Opportunities, 4-5 July, Bangi, Malaysia

Outline

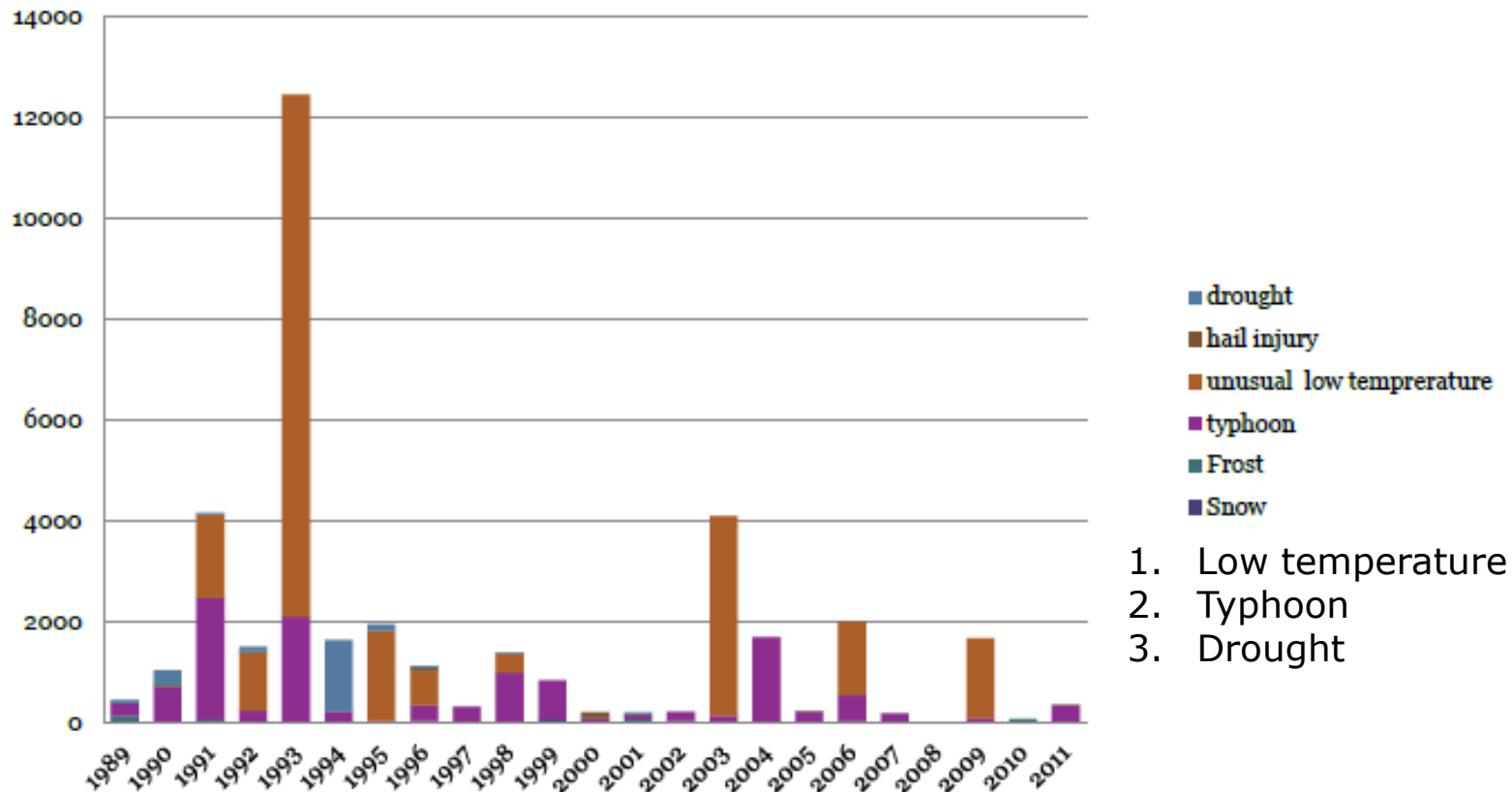
- Agriculture insurance environment in Japan
 - Survey of farmers for insurance effectiveness
 - Some preliminary conclusions
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- The background of the slide is a solid blue color. It is decorated with several white snowflake graphics of varying sizes and orientations, scattered primarily on the right side of the slide.

Objective

- To look at in what way crop insurance is helping farmers
- See whether there is a need for alternative risk insurance strategies such as weather index insurance compared to indemnity based insurance that is being currently offered to farmers




Crop damage by Natural Disasters in Japan (100 million Yen): Important perils

Crop damage by disaster, Ministry of Internal Affairs and Communications 2005, 2012



Types of Agriculture Insurance



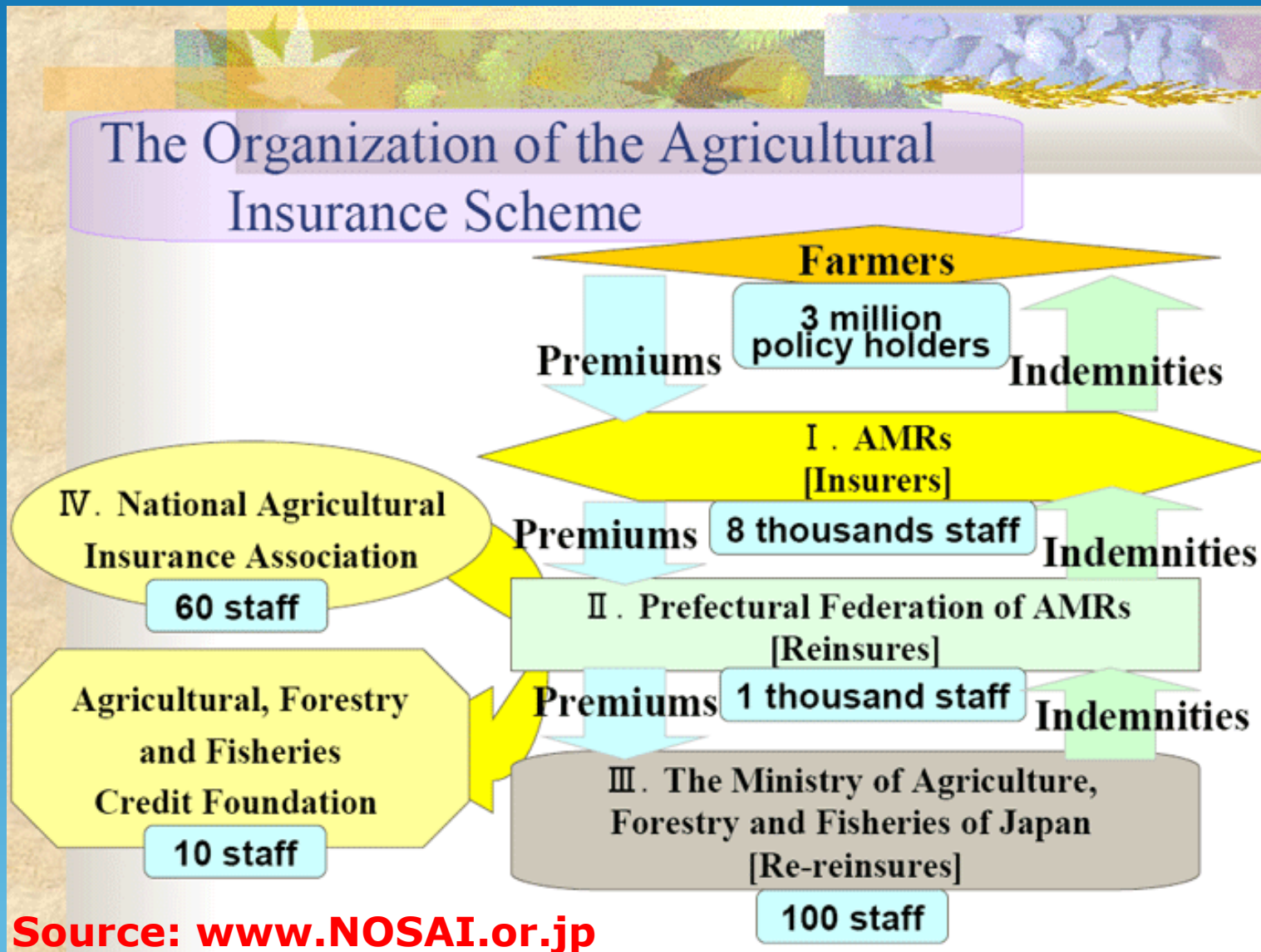
- Rice, sugarcane*, wheat, and barley
(Nation-wide program, *Okinawa) 
- Livestock insurance (Nationwide)
- Fruit and fruit-tree insurance
(Optional) 
- Sericulture insurance (Optional)
- Greenhouse insurance (Optional) 

Institutional Arrangements: NOSAI



- NOSAI stands for *Nogyo Kosai Saido (Agriculture Mutual Aid System)*
- Established as a result of Agriculture Natural Disaster Compensation Law 1947: to stabilize the agriculture income from disasters leading to the growth of Japanese agriculture
- NOSAI is a mutual aid system operated by the Agriculture Mutual Relief associations (AMRs) in each prefecture and the collection of AMRs is called NOSAI.
- The pool of insurance money generated from insurance premiums is used to pay insurance to farmers upon disaster.
- Multi-peril insurance

Organizational Structure



Source: www.NOSAI.or.jp

Paddy Insurance

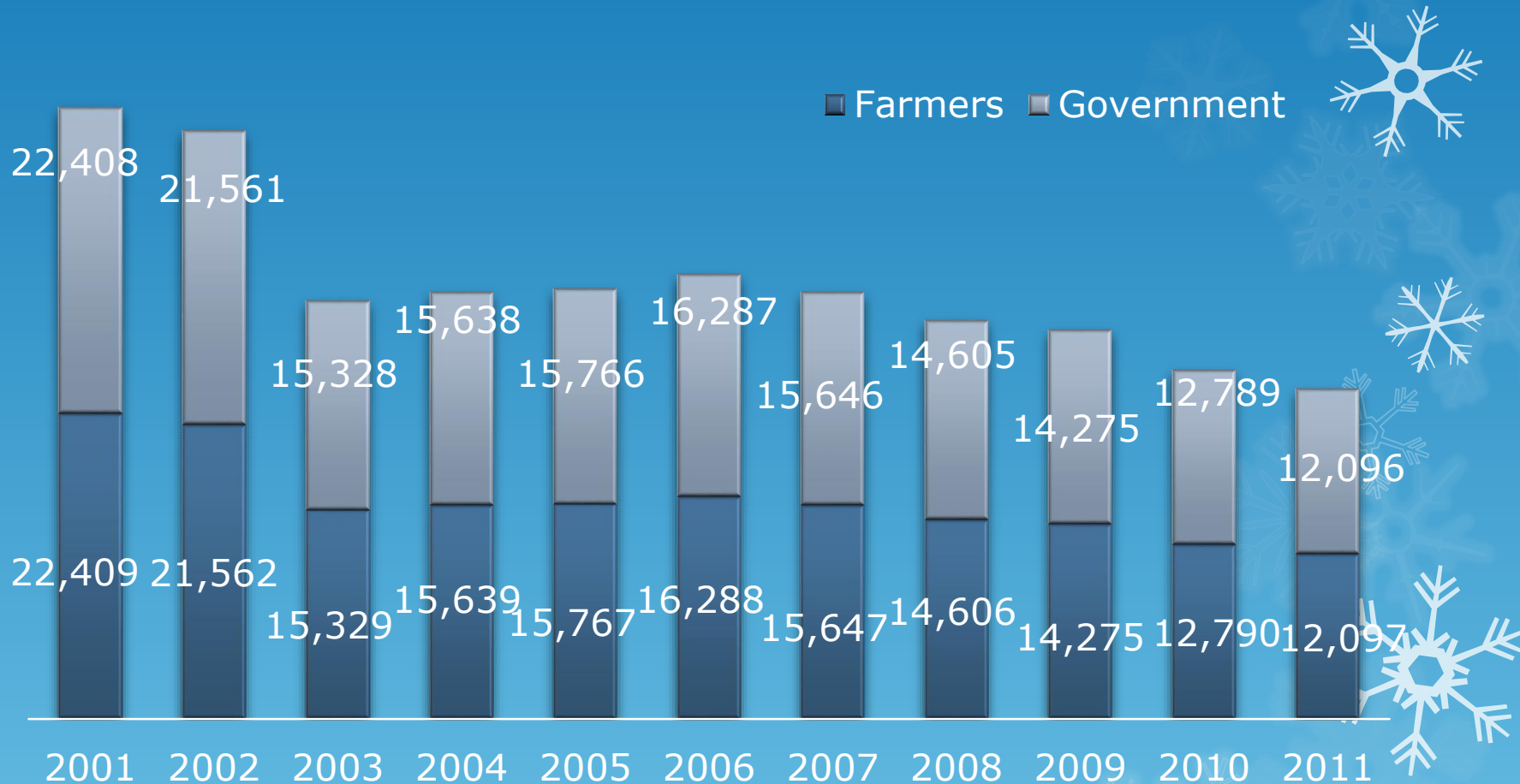


- Started in 1947 according to Agricultural Natural Disaster Compensation Law
- Conditions:
 - Compulsory participation for all the farmers
 - Subsidized by 50%
 - Covers between planting-harvesting
 - Compensation: By loss assessment
 - Offered throughout the country
 - The insurable land should be 20-40 acres paddy or 10-30 acres wheat

Sugarcane Insurance

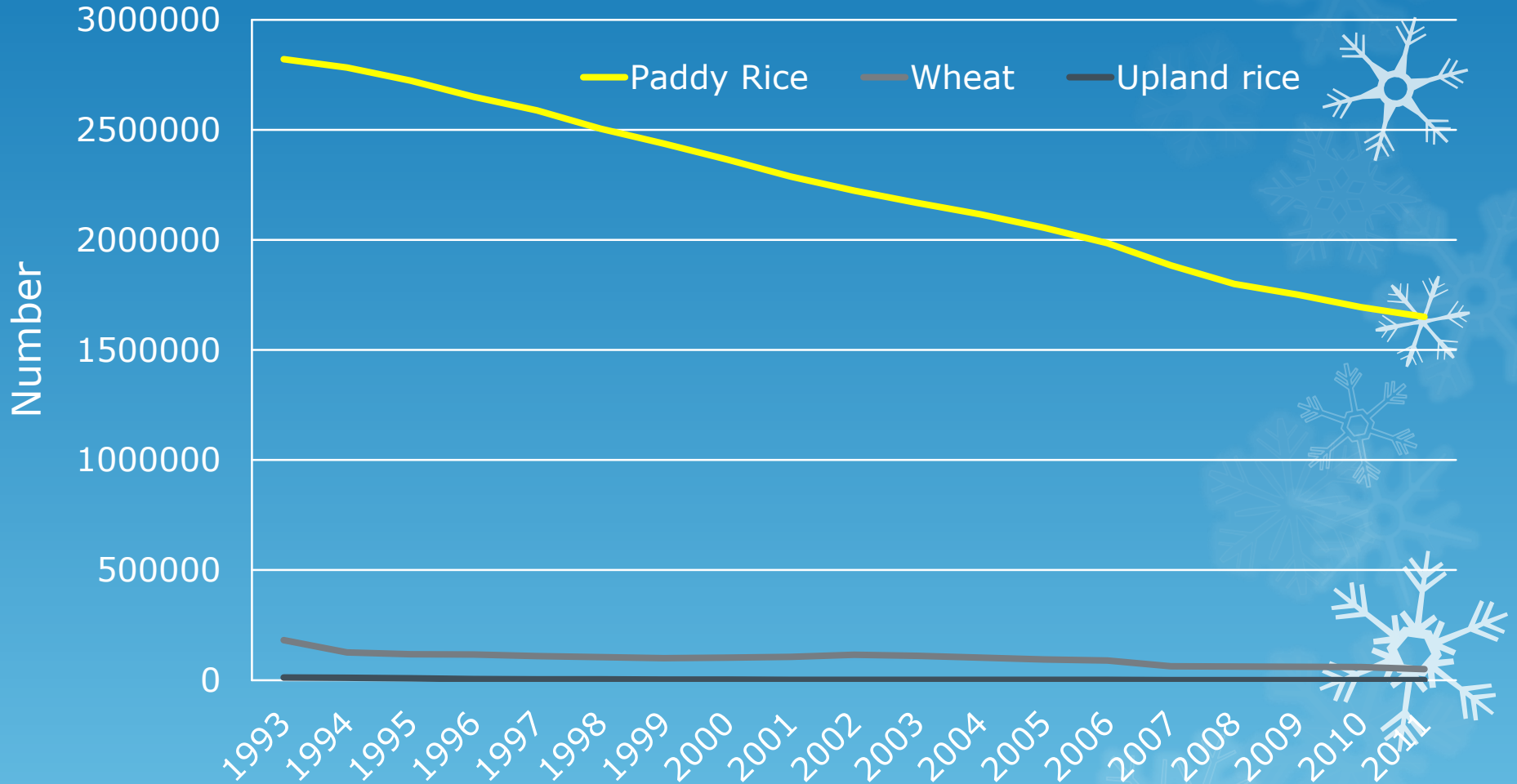
- Started in 1947 according to Agricultural Natural Disaster Compensation Law
- Conditions:
 - Voluntary participation for all the farmers
 - Subsidized by 55%
 - Covers between sprouting-harvesting
 - Compensation: By loss assessment
 - Offered in Kagoshima and Okinawa
 - The insurable land should be >5 acres in mainland and 10 acres in islands

Premiums for crop insurance (million yen)

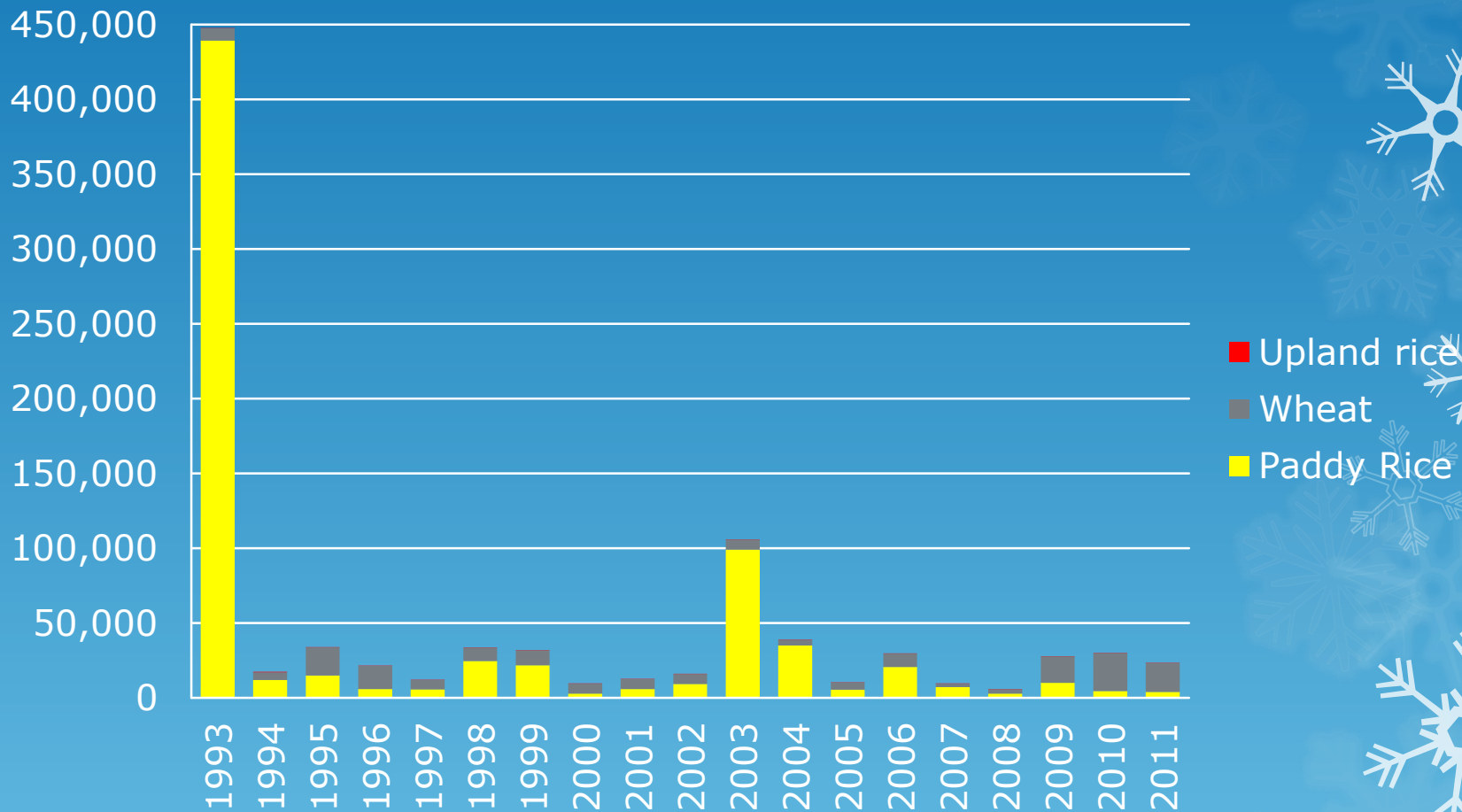


Source: NOSAI

Number of Farmers insured for Crop insurance



Indemnities for crop insurance (Million Yen)



Source: NOSAI

Insurance Performance: Indemnity/producer premium ratio (I/P)

Country	Period	I/P (producer loss ratio)
Brazil (Proagro)	75-81	4.29
Costa Rica	70-89	2.26
India (CCIS)	85-89	5.11
Japan	47-77	1.48
	85-89	0.99
Mexico (Anagsa)	80-89	3.18
Philippines (PCIC)	81-89	3.94
United States of America (FCIC)	80-89	1.87

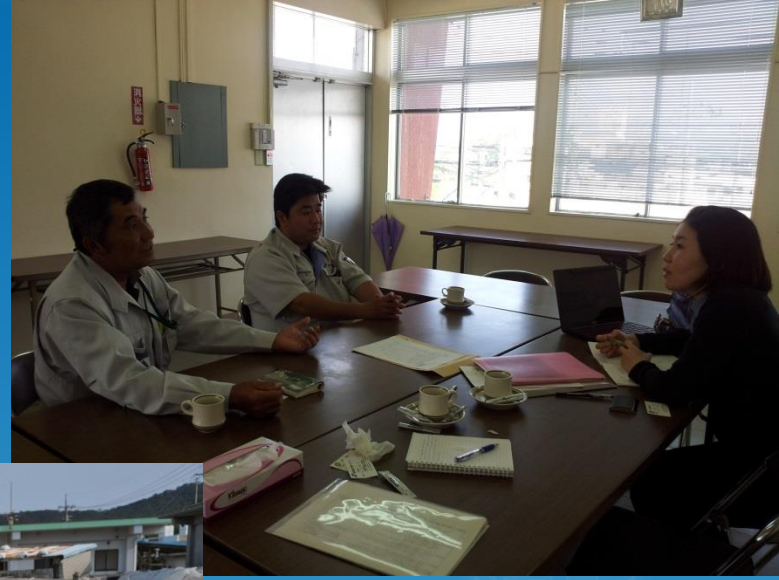
Source: FAO, 2011

Farmers Survey: Methodology

- **Interviews In Tokyo:** MAFF, NOSAI HQ , SONPO Japan
- **Interviews In Okinawa:** Prefectural government, 4 NOSAI branches, Group discussion in Irabu island (12 Farmers)
- **Questionnaire survey**
 - Consist of 35 multiple choice & open questions
 - Farmers in 6 Prefectures (Oita, Saga, Fukui, Hokkaido, Aomori, Okinawa) (38 respondents)
 - Prefectural government (1 respondent)
 - NOSAI staff (16 respondents)
 - Private insurance company (1 respondent)



Prefecture



Field office NOSAI



Farmers





(郵便番号 _____ NO. _____)

日本の農作物保険に関するアンケート(実施者向け)

回答者情報:

- 農作物保険の担当経験年数(年)を教えてください。
 1年未満 1-5年 6-10年 10年以上
- 現社で担当されている(されたことのある)保険の種類を教えてください。(複数回答可)
 農作物保険 家畜保険 果樹保険 漁業保険
 国営施設保険 その他: _____
- 現社で担当されている(されたことのある)業務内容を教えてください。(複数回答可)
 保険関連プロジェクトの企画・設計
 保険引受業務 損害評価 査察地理 研修・能力強化
 その他: _____

日本の農作物保険(水稲共済)を取り巻く環境について

- 日本の農家が、水稲共済について、どのように考えていると思われるか?
 全く重要でない 1 2 3 4 5 非常に重要である
- 4の回答について、その理由などを記入してください。(複数回答可)
 水稲被害が頻発に発生するため 日本の農家は経営的に豊かであるため 現社の水稲共済は、従来の行政的な被害補償よりも費用がかかるため(もし現社の共済以外に、行政的な被害補償が行われている/行進していた場合においてお答え下さい) 日本では水稲の被害を十分共済でカバーできるため
 その他: _____
- また、4の答えが“全く重要でない”であった場合、リスク削減のための効果的な代替対策は何かありますか?

(例: 被害にあった土地や農家のための情報を集めた資料網や、条件付き農次補償(例えば、年産がある特定産地以下になった場合を条件に、その条件に応じた補償金が支給される保険契約など、被災の事も含め。)

- 現社の水稲共済の状況について、どう思われますか?
- 7-1: 基金等への国庫補助について
 もっと多く補助してほしい とても十分な補助となっている
 1 2 3 4 5
- 7-2: 現社の国一連合会一組合等(あるいは国一特定組合)という組織形態について
 とても好ましい 未だ使っていない
 1 2 3 4 5
- 7-3: 監督省庁農水省の関与の度合い
 関与の度合いが低すぎる 関与の度合いが良すぎる
 1 2 3 4 5

その他: _____

- 水稲共済に関し、問題と感じることがあれば、以下から最大3つまで選んでください。
 掛け金が高い 水稲共済を企画・設計するにあたり専門性が不足している
 水稲共済を実施するにあたり経費等の負担が不足している 農家の水稲共済に関する知識不足
 過去の気候に関するデータや農作物被害データの不足
 農家共済組織への理解促進の欠如
 政府レベルで、水稲共済に対する関心が不足している 共済金の支給が遅い
 損害評価の仕組みに関与がある その他: _____
- 水稲共済の掛け金の国庫補助について、ご意見を聞かせて下さい。
 補助すべきである
 補助すべきではない(理由: _____)
- 3の答えが“補助すべきである”である場合、その割合についてご意見を聞かせて下さい。
 100%補助とすべきである 16%補助とすべきである
 現社の60%補助を維持すべきである
 26%補助とすべきである 10%補助とすべきである
 補助割合は農家の経営レベルによって決めるべきである



Paddy insurance Survey: Demographics

- 100% male!
- 53% are in the age group of 60-70 years and the rest are between 40-60 years.
- Mostly full time farmers (67%)
- 47% of them owned agriculture land of 4 ha and the rest between 1-3 ha.
- 37% earned an annual income of >10 million JPY (100,000 USD) and 27% didn't want to disclose their income.
- 94% of farmers received some kind of farm subsidy (other than subsidy in insurance).
- All respondents have been participating in insurance for several years.

Preliminary Observations

- 90% felt insurance is necessary for recovering from crop loss (highest among all the study countries) and the rest thought it is a good policy for the government to implement.
- 57% didn't find any loopholes in the system while 30% felt that the damage assessment was not up to their satisfaction.
- 57% received the compensation within 3 months of damage assessment while others received even sooner.
- Payment was timely for 83% and helped them to recover from the disaster. Majority felt that the damage assessment process was 'fair'.
- 43% felt that they recovered 'mostly' from the disaster with the help of insurance while the rest felt either recovered fully (30%) or didn't recover at all (10%).
- On the subsidy issue, most farmers felt the current level of subsidy is sufficient while 37% felt that it should be increased to 70%. None favored the removal of subsidy.

Sugarcane Insurance

- **Farmer 1:** Okinawa mainland, has <100 acres
Premiums: $¥9,000 \times 7 \text{ years} = ¥63,000$
Indemnities: $¥83,000$ (last year) = **NET BENEFIT!**
- **Farmer 2:** Okinawa mainland, has area of 338a
Premiums: $¥70,000 \times 10 \text{ years} = ¥700,000$
Indemnities: $¥1,470,000$ (last year) = **NET BENEFIT!**
- **Farmer 3:** Irab island
Premiums for 24 years = $¥3,000,000$
Indemnities: $¥5,000,000$ (last year) = **NET BENEFIT!**

What are the DRR and CCA benefits of this payoff?

Preliminary Conclusions

- Farmers have reported the net benefit from crop insurance in questionnaire surveys (paddy) and in terms of indemnities received (Sugarcane)
- Subsidy played a major role in farmers finding the insurance profitable/useful (the net positive indemnities was after 55% insurance)
- Insurance helped in recovery from disaster according to 73% of respondents
- No major issues were reported in terms of moral hazard and hence both the insurance company and the farmers prefer indemnity based insurance (corroborated by the least I/P ratio)
- There is a considerable resistance from farmers for changing from indemnity based insurance to index based insurance (why fix that is not broken)

Thank you!

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