Overview of Japanese agricultural development and contribution factor

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PRODUCTIVITY INCREASE AND MAJOR INPUT TO AGRICULTURE
Development stage of Japanese agriculture

1. Formulation of foundation (‘00)
2. Initial growth (‘00–’20)
3. Stagnant during War (‘20–’35)
4. Destruction by WWII (‘35–’45)
5. Rehabilitation from WWII (‘45–’55)
6. Rapid economic growth (‘55–’65)
7. Saturation of the market (‘65–’85)
8. Globalized Economy (‘85–)

Source: Yujiro Hayami, 2001
Major factor for growth shifted from “land productivity” to “landholding”

<table>
<thead>
<tr>
<th>Stage</th>
<th>Growth rate (Log%)</th>
<th>Contribution of each factor to labor productivity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labor productivity (1)</td>
<td>Landholding (2)</td>
</tr>
<tr>
<td>1: 1880-1900</td>
<td>1.6</td>
<td>0.5</td>
</tr>
<tr>
<td>2: 1900-1920</td>
<td>1.9</td>
<td>0.7</td>
</tr>
<tr>
<td>3: 1920-1935</td>
<td>1.0</td>
<td>0.4</td>
</tr>
<tr>
<td>4: 1935-1945</td>
<td>-1.8</td>
<td>-0.3</td>
</tr>
<tr>
<td>5: 1945-1955</td>
<td>3.4</td>
<td>0.4</td>
</tr>
<tr>
<td>6: 1956-1965</td>
<td>6.6</td>
<td>3.5</td>
</tr>
<tr>
<td>7: 1965-1980</td>
<td>4.6</td>
<td>3.7</td>
</tr>
<tr>
<td>8: 1980-1995</td>
<td>3.2</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Continuous grow

- Labor productivity = total production / # of farmer
- Landholding = total farm area / # of farmer
- Land productivity = total production / total farm area

Source: Yujiro Hayami, 2001
General concept for agricultural production

Production = F(Labor, Land, Inputs)
Comparison of major production factors between “initial growth” and “2\textsuperscript{nd} growth”

<table>
<thead>
<tr>
<th>Year</th>
<th>Growth% of labor</th>
<th>Growth% of land</th>
<th>Growth% of inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial growth 1880-1935</td>
<td>-0.1</td>
<td>0.4</td>
<td>1.5, 4.3</td>
</tr>
<tr>
<td>2\textsuperscript{nd} growth 1945-1995</td>
<td>-3.7</td>
<td>-0.4</td>
<td>5.4, 1.3</td>
</tr>
</tbody>
</table>

Fertilizer application improve land productivity, while mechanization enable farmer to cultivate larger area without extra labor.

Source: Yukiyo Hayami, 2001
How environmental limitation in technology dissemination was overcome during “initial growth”?

TECHNOLOGY DISSEMINATION AND ENVIRONMENT
Overcome environmental limitation through technology innovation

Mere increase of inputs can not bring such a dramatic spur of growth

To optimize inputs, technical innovation is required in three way,

(1) Develop optimal farming technology
(2) Adaptation to the environment
(3) Modification of the environment
Develop optimal farming technology

*One example: develop “fertilizer responsive” variety

<table>
<thead>
<tr>
<th>Variety</th>
<th>Low fertilizer (N:106kg/ha)</th>
<th>High fertilizer (N:168kg/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grain (t/ha)</td>
<td>Straw (t/ha)</td>
</tr>
<tr>
<td>Japanese</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kameno o</td>
<td>6.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Fuku bouzu</td>
<td>6.1</td>
<td>8.6</td>
</tr>
<tr>
<td>Rikuu-232</td>
<td>6.5</td>
<td>7.7</td>
</tr>
<tr>
<td>Norin-1</td>
<td>7.1</td>
<td>8.1</td>
</tr>
<tr>
<td>Norin-2</td>
<td>5.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Batak</td>
<td>6.1</td>
<td>10.6</td>
</tr>
<tr>
<td>Habiganj7</td>
<td>5.4</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Source: Yujiro Hayami, 2001
Adaptation to the environment

1. Development of cold tolerant variety
   ✓ Western high yielding variety “Shin-rika” was not tolerant to cold weather in the east. Thus, could tolerant high yielding variety “Kameno o” was developed

2. Cultivation method to improve cold tolerance
   ✓ protected semi-irrigated rice nursery
Modification of the environment

1. Reform of ill-drained paddy field
   ✓ Drainage development combined with horse plowing
   ✓ Improved soil nutrient availability

2. Support to farmland development
   ✓ Land consolidation law (1899)
   ✓ Japan hypothec bank (low interest loan using farmland as hypothecated asset) (1897)
   ✓ Government subsidized land consolidation project (1906-)
1. During the initial growth stage, farming technology was developed and adopted in the western part of Japan, which had preferable environmental conditions.

2. Technology was transferred to the eastern part after adaptive research and irrigation/drainage development.

Source: Yujiro Hayami, 2001
Where are the technology source, how it is disseminated?

TECHNOLOGY DISSEMINATION PATTERN
# Process of technology dissemination

<table>
<thead>
<tr>
<th>Year / stage</th>
<th>What happened?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feudal system - 1868</td>
<td>Closed society: technologies were developed and accumulated within local government level, or even village level</td>
</tr>
<tr>
<td>Early modern 1868-</td>
<td>The Meiji restoration</td>
</tr>
<tr>
<td>1870-1880</td>
<td>Introduction of western farming technology: failed</td>
</tr>
</tbody>
</table>
| Initial growth 1880-1920 | Introduction of farmer-farmer technology transfer  
• Verification of farmer developed technology  
• Technology dissemination through, “village level round table”, “seed exchange meeting” |
| Stagnant 1920-1945 | • Accumulated technical resources were used up  
• Depletion of labor force and agricultural inputs during war                             |
| 1920-             | Government start to develop national research network to substitute farmer developed technology                                            |
| 2nd growth 1945-1965 | • Maturation of national research network (norin-10, etc.)  
• Increased usage of agricultural input  
• Mechanization enhance labor shift from agriculture to other industry                  |
Productivity increase, labor shift, changing consumer’s preference

AGRICULTURAL DEVELOPMENT AFTER WWII
# Productivity increase and labor shift

<table>
<thead>
<tr>
<th>Year</th>
<th>primary industry (1000)</th>
<th>secondary industry (1000)</th>
<th>tertiary industry (1000)</th>
<th>rice yield (t/ha)</th>
<th>number of tractor</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial growth</td>
<td>1880-1920</td>
<td>Around 14,000</td>
<td>No data</td>
<td>No data</td>
<td>1.8 - 2.9</td>
<td>-</td>
</tr>
<tr>
<td>Stagnant</td>
<td>1920</td>
<td>14,672</td>
<td>5,598</td>
<td>6,464</td>
<td>2.91</td>
<td>9</td>
</tr>
<tr>
<td>1930</td>
<td>14,711</td>
<td>6,002</td>
<td>8,836</td>
<td>2.89</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td>14,392</td>
<td>8,443</td>
<td>9,429</td>
<td>3.09</td>
<td>3,900</td>
<td></td>
</tr>
<tr>
<td>2nd growth</td>
<td>1950</td>
<td>17,478</td>
<td>7,838</td>
<td>10,671</td>
<td>3.27</td>
<td>35,000</td>
</tr>
<tr>
<td>1955</td>
<td>16,291</td>
<td>9,247</td>
<td>14,051</td>
<td>3.39</td>
<td>80,000</td>
<td></td>
</tr>
<tr>
<td>1960</td>
<td>14,389</td>
<td>12,804</td>
<td>16,841</td>
<td>3.93</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>11,857</td>
<td>15,115</td>
<td>20,969</td>
<td>4.08</td>
<td>3,000,000</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>10,146</td>
<td>17,897</td>
<td>24,511</td>
<td>4.39</td>
<td>3,200,000</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>7,347</td>
<td>18,106</td>
<td>27,521</td>
<td>4.62</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>6,102</td>
<td>18,737</td>
<td>30,911</td>
<td>4.61</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>5,412</td>
<td>19,334</td>
<td>33,444</td>
<td>4.97</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>4,391</td>
<td>20,548</td>
<td>36,421</td>
<td>4.91</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>3,820</td>
<td>20,247</td>
<td>39,642</td>
<td>4.92</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

- **Rural population**
  - Yield increase
  - Mechanization
  - Industry growth

- **Urban population**
## Income increase and diversified diet

<table>
<thead>
<tr>
<th>Year</th>
<th>Rice</th>
<th>Wheat</th>
<th>Tuber</th>
<th>Vegetable</th>
<th>Fruits</th>
<th>Meet</th>
<th>Egg</th>
<th>Dairy</th>
<th>Fish</th>
<th>Sugar</th>
<th>oil</th>
<th>GDP$/capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911–1915</td>
<td>358</td>
<td>27</td>
<td>156</td>
<td>239</td>
<td>25</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>10</td>
<td>15</td>
<td>1</td>
<td>1,356</td>
</tr>
<tr>
<td>1921–1925</td>
<td>391</td>
<td>40</td>
<td>146</td>
<td>216</td>
<td>22</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>22</td>
<td>30</td>
<td>2</td>
<td>1,859</td>
</tr>
<tr>
<td>1931–1935</td>
<td>385</td>
<td>38</td>
<td>128</td>
<td>221</td>
<td>36</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>28</td>
<td>33</td>
<td>2</td>
<td>1,837</td>
</tr>
<tr>
<td>1946</td>
<td>254</td>
<td>40</td>
<td>166</td>
<td>151</td>
<td>19</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>26</td>
<td>2</td>
<td>0</td>
<td>1,555</td>
</tr>
<tr>
<td>1960</td>
<td>315</td>
<td>71</td>
<td>83</td>
<td>273</td>
<td>61</td>
<td>14</td>
<td>17</td>
<td>61</td>
<td>76</td>
<td>41</td>
<td>12</td>
<td>3,988</td>
</tr>
<tr>
<td>1973</td>
<td>249</td>
<td>85</td>
<td>44</td>
<td>302</td>
<td>118</td>
<td>47</td>
<td>39</td>
<td>144</td>
<td>93</td>
<td>77</td>
<td>30</td>
<td>11,439</td>
</tr>
<tr>
<td>1980</td>
<td>216</td>
<td>88</td>
<td>47</td>
<td>302</td>
<td>106</td>
<td>62</td>
<td>39</td>
<td>170</td>
<td>95</td>
<td>64</td>
<td>38</td>
<td>13,429</td>
</tr>
<tr>
<td>1983</td>
<td>207</td>
<td>87</td>
<td>49</td>
<td>294</td>
<td>107</td>
<td>65</td>
<td>40</td>
<td>183</td>
<td>94</td>
<td>59</td>
<td>41</td>
<td>14,308</td>
</tr>
</tbody>
</table>
Agricultural development and its social impact

1. Change in supply side
   - Chemical fertilizer, improved variety, irrigation have been contributed to productivity increase
   - Labor surplus arising from productivity increase is allocated to other industry

2. Change in demand side
   - One of the fundamental demand of human is, to eat delicious food until full stomach
   - This demand have always been satisfied in a stepwise manner, namely, full stomach first, followed by delicious food, in accordance with productivity/income growth
Trend of rice production and rice policy in Japan after WW2

- WW2
- Self sufficiency
- Land consolidation mechanization
- Early transplant, fertilizer use, chemical use
- Production adjustment
- Financial burden increase
- End of Price support
- Diversification structural reform income gap adjustment

- Land Reform Law
- Food Control Law
- Agricultural Basic Law
- Food law
- New Food law
Common problem which industrialized countries will face

STAGNANT PERIOD AFTER 2^{ND} GROWTH
Common agricultural problem for industrialized country

- Two limitations arise in the course of agricultural development
  - Demand limitation (after self sufficiency, farmer have to struggle with price fall)
  - Resource limitation (Land and water)
- “movement of human resource” is slower than that of “movement of goods”
- Relatively weak agricultural sector tend to be protected in the form of income redistribution
Fundamental issue of Japanese agriculture is that Sectorial reform cannot catch up with rapid decreasing demand.
JAPANESE EXPERIENCE EXTENDED TO OTHER COUNTRIES
What happened in Japan?

Three steps in rice farming technology dissemination in Japan

1. **Technology development**
   Fertilizer responsive varieties (West)

2. **Adaptation to the environment**
   Cold tolerant varieties (West ⇒ East)

3. **Modification of the environment**
   Irrigation development (prime land ⇒ marginal land)

⇒ Same process occurred in surrounding countries
Dissemination of rice technology - variety development & irrigation -

**Fertilizer responsive rice variety**
1. 1900- Variety dev. in West Japan
2. 1920 Cross breed with Taiwanese var.
3. 1962 Cross breed with Indonesian var.
4. 1965-1975 Disseminated to all Asia (Green revolution)

**Cold tolerant rice technology**
1. 1900- Variety dev. in East Japan
3. 1910- Variety promoted in Korea
4. 1920- Variety moved to Northern China with irrigation dev.
2. 1920- Further variety improvement for cold tolerance
What happened in Asia?

Three steps in rice farming technology dissemination in Asia

1. Technology development
   Fertilizer responsive varieties (Japan)
   Cold tolerant varieties (Japan ⇒ Korea ⇒ China)

2. Adaptation to the environment
   Tropical varieties (Japan ⇒ Taiwan ⇒ Philippine:IRRI)

3. Modification of the environment
   Irrigation development

⇒ Contribution of Japanese technology to “two green revolution”
Challenges for latecomer

1. Investment efficiency of irrigation is determined by “cost of investment” and “return from products”
2. Accordingly, investment tends to be accelerated when commodity price is high (see the graph above)
3. Challenge is, since green revolution during 1970s’, commodity price is constantly decreasing
4. This means, investment efficiency of irrigation is decreasing year by year
CARD is a coalition of African countries and donor agencies, initiated by Japan and AGRA (African Green Revolution Association). This initiative was a part of Japan’s commitment in TICADIV 2008.

CARD aims at doubling annual rice production in Sub-Saharan Africa from the average level of 14 million tons in early 2000’s to 28 million tons by 2018.

Under CARD initiative, 22 countries have developed National Rice Development Strategy. It includes 31 projects (seed production, irrigation, postharvest facility, etc.) under Japanese support as well as hundreds of projects contributed by the partners of CARD.
Integrated rice farming support in Tanzania

**Basic infrastructure and Training on modern rice technology**

- **Training center**
  - Kilimanjaro agricultural development center (KADC)
  - KADC plan (1978-86)
  - Validation of irrigated rice farming tech.

- **Farming technology**
  - KADC plan (1978-86)
  - Kilimanjaro agricultural development center (KADC)
  - KADP (1986-93)
  - Extension of high yielding rice farming tech. in lower Moshi scheme

- **Irrigation**
  - Lower Moshi Irrigation scheme
  - Modern Irrigation development (1981)

**Human resource development for rice farming technology**

- **Kilimanjaro agricultural Training center (1994-2001)**
  - KATC Phase2 (2001-06)
  - Rice yield in six pilot site
  - Improved Irrigated rice training course was established

**Nationwide technology dissemination (rain-fed and irrigated)**

- **TanRice Phase1 (2007-2012)**
  - Nationwide yield improvement of irrigated rice
  - Upland rice training start

- **TanRice Phase2 (2012-2018)**
  - Expand training for irrigated rice
  - Continue upland rice training
  - Lowland rain-fed rice farming training start
  - Integrated cross-sector thematic training
    - marketing
    - postharvest technology
    - gender
    - Water user's association
    - Farm mechanization

**Integrated development study (1978)**

- 1981-

**Integrated development study (1978)**

- 1981-

**Integrated development study (1978)**

- 1981-

**Integrated development study (1978)**

- 1981-

**Integrated development study (1978)**

- 1981-
VALUE CHAIN ENHANCEMENT
1. Until 1960, main focus of Japanese agriculture was self sufficiency of rice. Price support was important measure to ensure supply
2. In 1961, when rice sufficiency was expected reach 100%, heavy financial burden was expected to maintain price support system (over production)
3. Government decided to change agriculture policy from “rice only” to “diversified agriculture”, expecting minimization of rice demand/supply gap while increasing farm income. And introduced number of support measure for diversification (technical, financial)
4. In this process, farmer cooperative played key role to identify market, quality control, group farming and technical service
5. Since then, number of successful/failure observed throughout the country. Experience and knowledge accumulated accordingly.
1. What is SHEP?

- Stands for “Small-holder Horticulture Empowerment and Promotion” Approach

- Developed in Kenya through technical cooperation project by JICA which started from 2006 and succeeded in increasing farmers’ income

- An approach which realize “Market-Oriented Agriculture”

![Graph showing income increase](image)
## 2. SHEP’s 4 Important Steps

<table>
<thead>
<tr>
<th>4 Steps</th>
<th>Activities</th>
</tr>
</thead>
</table>
| 1. SHEP selects target beneficiaries and the implementers and beneficiaries share the vision/goal. | Sensitization Workshop  
Selection of Target District  
Selection of Target Beneficiaries |
| 2. SHEP helps the farmers discover knowledge and opportunities.         | Participatory Baseline Survey  
FABLIST (Farm Business Linkage Stakeholder) Forum  
Market Survey |
| 3. SHEP helps the farmers formulate a plan                              | Crop Selection  
Action Plan Making |
| 4. SHEP facilitates the realization of the plan by providing technical solution to the farmers. | In-field trainings after TOT |
1. Sharing the vision/goal Sensitization Workshop

- All levels of stakeholders attend the workshop
- Participants understand what they are going to do
- Participants identify their roles and responsibilities
- All stakeholders share how to realize Market-Oriented Agriculture
2. Awareness of situation

Market Survey

• First, farmers and extension staff are trained how to conduct the Market Survey.
• Farmers understand not only price but also required quality and quantity, selling condition, price fluctuation, etc.
• Both market stakeholders and farmers can share their own information.
### 3. Decision Making

#### Crop Selection

- Based on the results of Market Survey, group members of farmers prioritize their target crops by themselves.

<table>
<thead>
<tr>
<th>Crops</th>
<th>Experienc e</th>
<th>Time for planting and Duration</th>
<th>Expected yield / acre (kg)</th>
<th>Average / Expected price (Ksh)</th>
<th>Expected total income (Ksh)</th>
<th>Cost of production (Ksh)</th>
<th>Expected benefit (Ksh)</th>
<th>Market condition</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrot</td>
<td>No</td>
<td>April, 3 months</td>
<td>4,000</td>
<td>20</td>
<td>80,000</td>
<td>25,000</td>
<td>55,000</td>
<td>Middle size, cash, shape</td>
<td>2</td>
</tr>
<tr>
<td>Onion</td>
<td>No</td>
<td>March, 6 months</td>
<td>2,000</td>
<td>15</td>
<td>30,000</td>
<td>10,000</td>
<td>20,000</td>
<td>Large size, cash</td>
<td>4</td>
</tr>
<tr>
<td>Kale</td>
<td>Yes</td>
<td>March, 3 month</td>
<td>8,000</td>
<td>3</td>
<td>24,000</td>
<td>5,000</td>
<td>19,000</td>
<td>Fresh, cash</td>
<td>3</td>
</tr>
<tr>
<td>Tomato</td>
<td>Yes</td>
<td>May, 4 months</td>
<td>6,000</td>
<td>30</td>
<td>180,000</td>
<td>50,000</td>
<td>130,000</td>
<td>Well matured, middle size</td>
<td>1</td>
</tr>
</tbody>
</table>

Ex) Nov 2018
4. Provision of Technical Solution

Demand Driven In-field Training

- Extension staff are trained on crops or skills according to farmers’ needs
- All skills are easy for farmers to adopt
- Farmers learn what they want to know, so adoption rate is high
5. What can SHEP bring about change?

Change of farmers’ mind on marketing from “Grow and Sell” to “Grow to Sell”

<table>
<thead>
<tr>
<th>Name &amp; Contact of Produce Dealer</th>
<th>Produce &amp; Variety</th>
<th>Produce Quality Market Requirements</th>
<th>Peak Demand (months)</th>
<th>Quantity (kg) &amp; Frequency (daily/weekly/etc) of Supply</th>
<th>Unit Price (Ksh./kg)</th>
<th>Mode of Payment</th>
<th>Terms of Payment</th>
<th>Marketing Challenges</th>
<th>Dealer’s Willingness to purchase the Produce from the Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>S. K. Mwai (0722-xxxxxxx)</td>
<td>Tomato (cali)</td>
<td>- Medium size - Half ripe</td>
<td>March, April, &amp; May</td>
<td>1,000 kg/week</td>
<td>100</td>
<td>Cash</td>
<td>Cash on Delivery</td>
<td>Inadequate Storage Facilities</td>
<td>Willing</td>
</tr>
<tr>
<td>J. O. Ouma (0736-xxxxxxx)</td>
<td>Tomato (cali)</td>
<td>- Large size - Half ripe</td>
<td>February &amp; March</td>
<td>2,500 kg/week</td>
<td>120</td>
<td>Cheque</td>
<td>Two Weeks after Delivery</td>
<td>Inadequate Storage Facilities</td>
<td>Willing</td>
</tr>
<tr>
<td>G. J. Adju (0720-xxxxxxx)</td>
<td>Tomato (cali)</td>
<td>- Medium size - Half ripe</td>
<td>December &amp; January</td>
<td>2,500 kg/week</td>
<td>115</td>
<td>Cash</td>
<td>A week after Delivery</td>
<td>Inadequate Storage Facilities</td>
<td>Willing</td>
</tr>
</tbody>
</table>

Market Survey by Farmers

e.g.) Results of the Market Survey
Nov 2018
Improvement on Gender/Family budgeting

SHEP’s training for Gender/ family budgeting
- Gender Awareness training
- Family budgeting Training

- Invite both men and women to training so that both will acquire skills and knowledge.
- Women and men will participate in the household decision-making.
- Sensitize both men and women on the importance of shearing workload and responsibilities.

↓
Both incomes from horticultural farming and happiness of the family are enhanced.

After attending the SHEP Gender Awareness Training, I started valuing the role my wife played and started to include her in the management of our income. We are all very happy since we now respect each other and also because our livelihood has actually improved a lot from horticultural farming.
6. SHEP Expansion

- “We would like to transition away from agriculture “that enables the farmer to eat” to agriculture the farmer to earn money.”
- by Prime Minister Mr. Shinzo ABE@TICAD V in 2013

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Japan’s Assistance Package for Africa at TICADV

III. Empowering Farmers as Mainstream Economic Actors (Agriculture, Food and Nutrition Security)

- Double rice production in Sub-Sahara Africa to **28 million** tons by 2018 (continuing efforts of CARD (Coalition for African Rice Development))
- Transform farmers to move from subsistence to commercial agriculture through SHEP approach*2 in **10 countries**
- Capacity building of 1,000 skilled agricultural trainers
- Organize smallholders cooperative consisting 50,000 people
*2 SHEP is an effort to assist increasing income of smallholders such as through training on market research

1,900 official from 23 countries participated SHEP training

42,468 farmers benefit from SHEP activities in respective countries

African countries sharing their experience with each other through key countries, Kenya (English speaking) and Senegal (French speaking)

And now, SHEP activity can be observed in Asia and Latin America

As of April, 2017

① SHEP training course (in Japan/Kenya)
   (for extension officer and program officer)

② South Africa SHEP regional workshop followed up by JICA regional expert

③ Technical Cooperation Project
Thank you very much!

Any question / feedback?

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