Seminar on Mechanization Trends of Potato Growing in Asia-Pacific Area

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1. Cultivation & spring technology
2. Preservation
3. Harvest & transport
4. Storage technology

Farm Management!
Global challenges

• The world population is growing by 100 million people a year ¹)

• 1 billion people are starving. 5 million people die every year of hunger

• Water is the future be the limiting resource and reduce the world's usable area

• The United Nations has declared 2008 as the Year of the Potato, because of their importance for food security. ? (Rice, wheat, maize, potato)

„The potato is in the frontline in the fight against world hunger and poverty!“
Jacques Diouf, General Director of FAO

¹) United Nations, www.FAO.org
²) www.FAO.org
Potato world

18.600.000  ha
340.000.000  t
18,2  t/ha

Each point shows 1000 ha

Source: FAO Stat
Did you know that more than half of the potatoes are collected by hand worldwide?
Did you know that in the United States they need least labor for the harvest?
Did you know that in India potatoes are carried by hand in warehouses with more than seven floors?
Did you know that modern harvesting equipment are able to adjust in accordance with the conditions automatically based on intelligent systems?
Did you know that every third potato is produced and consumed in India and China?
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Farm Management!
Trends: Quality via right farm management

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Demofarm Yancheng Jiangsu Keshan Farm Heilongjiang
Trends: Increase in performance

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Trends: Increase in performance via combination

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1970

2016

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Trends: Increase in performance

1. Cultivation & spring technology
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Trends: Increase in performance

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Trends: Increase in performance and automation

1. Cultivation & spring technology
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Trends: Marketing safety through quality

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Traditional potato handling process in India
Mechanization of the potato handling process
Trends: Increase in performance

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Trends: Increase in performance

New storage lines offer capacity of over 200 tons per hour!

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Trends: Marketing safety through quality

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... and in the future?

- Leader Follower Concept?
- Data management?
- Automated units?
- New logistics systems?

Ca. 2025
Thank you for your attention!