

## Global issues of Global Food Security

Prof. dr ir Rudy Rabbinge

Emeritus university professor  
Sustainable Development & Food Security

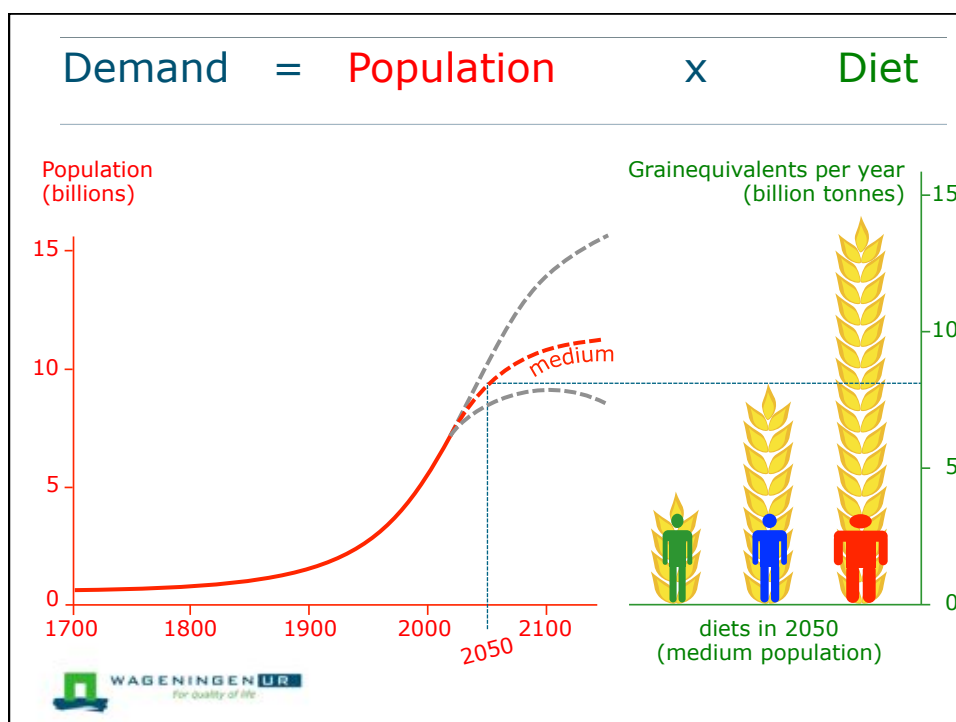
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## Outline

- The issue
- Global challenges
- From vision to action
- Partnerships
- Way forward





## Food Security

*a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food, that meets their dietary needs and food preferences for an active and healthy life (FAO, 2002)*

4 dimensions to be fulfilled simultaneously:

- physical availability of food
- economic and physical access
- food utilisation
- stability of the three dimensions over time (FAO, 2008)



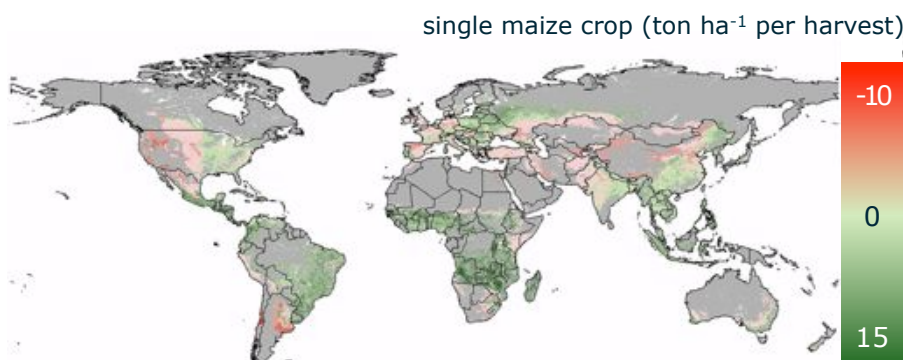
Two times...



## Global challenges



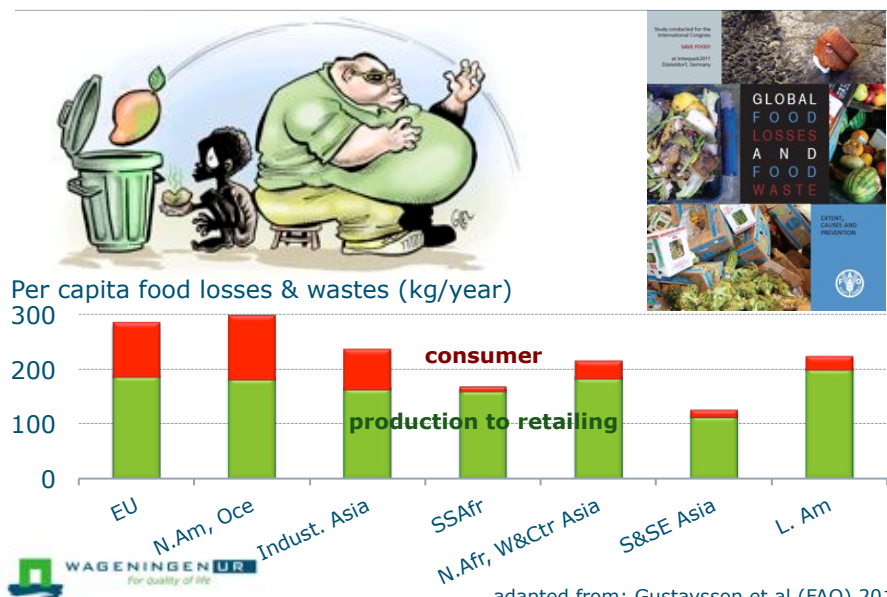
## Closing the Yield Gap ...



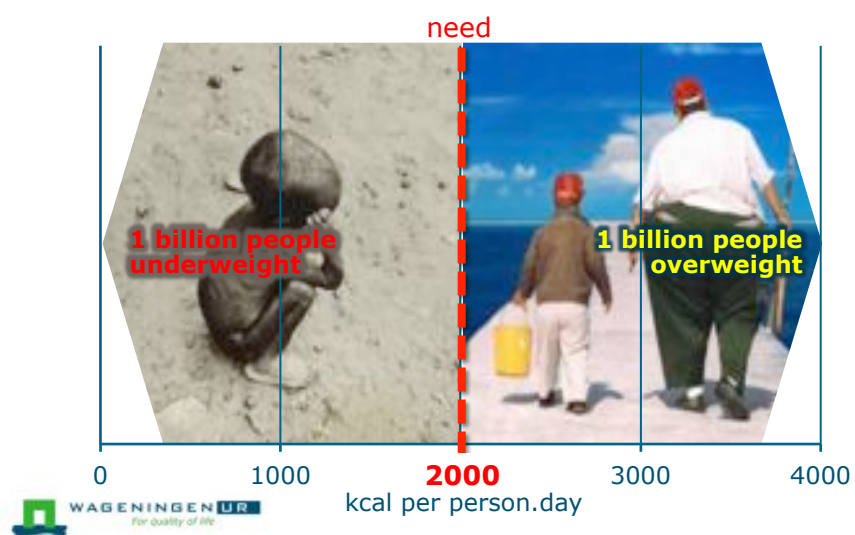
after: Conijn et al. 2011

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## Reducing food waste



## Accessibility issues

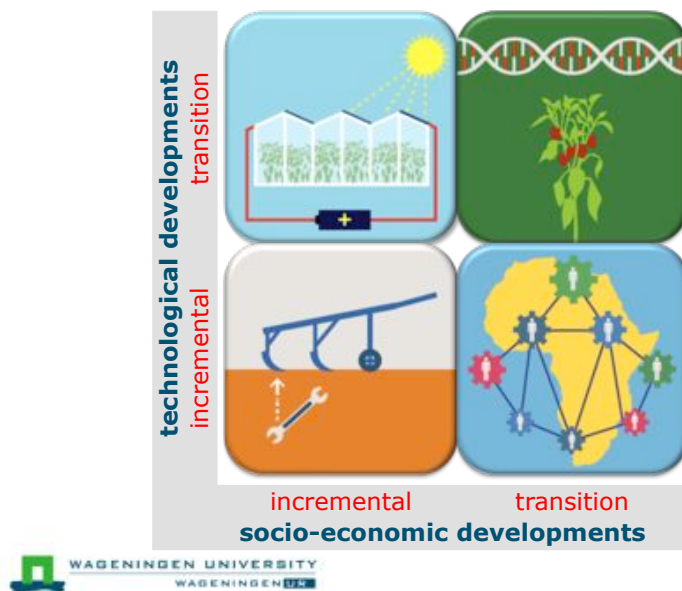


## From vision to action

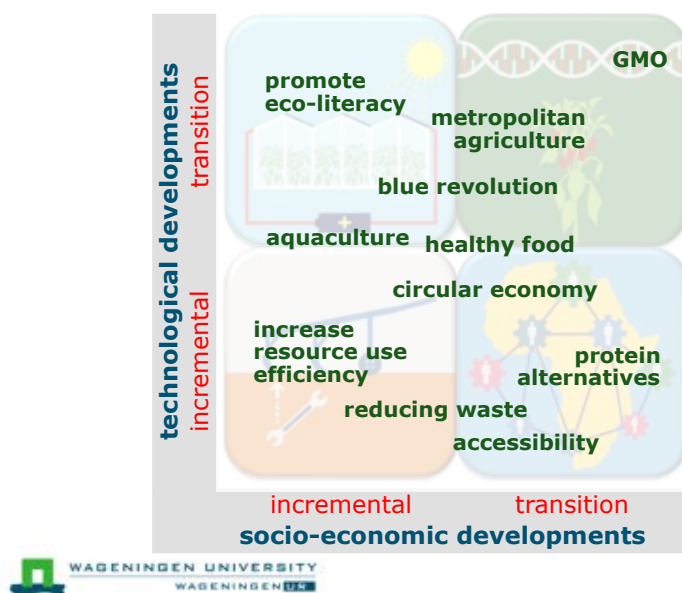




## Four possible approaches



## Four possible approaches

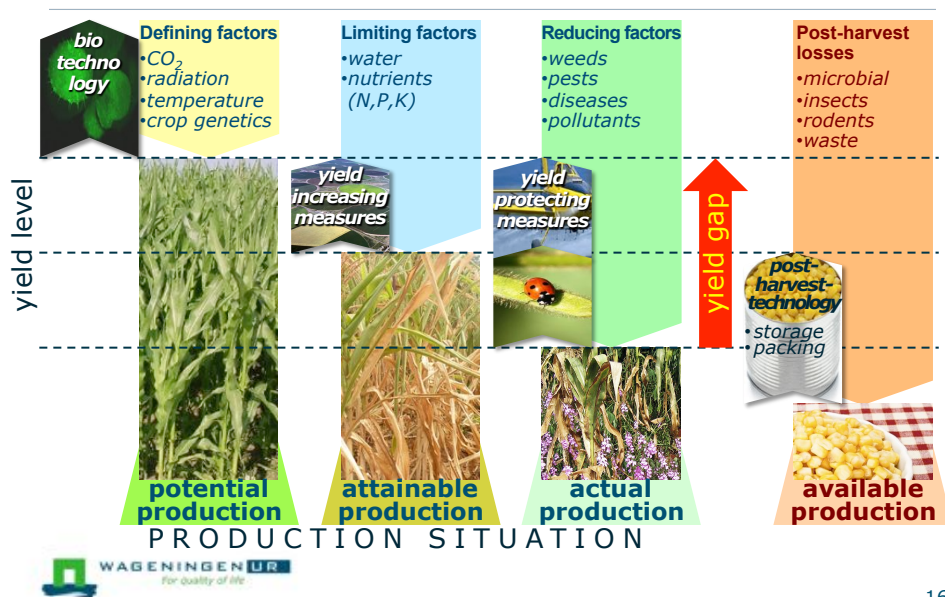


## Megatrends in agriculture



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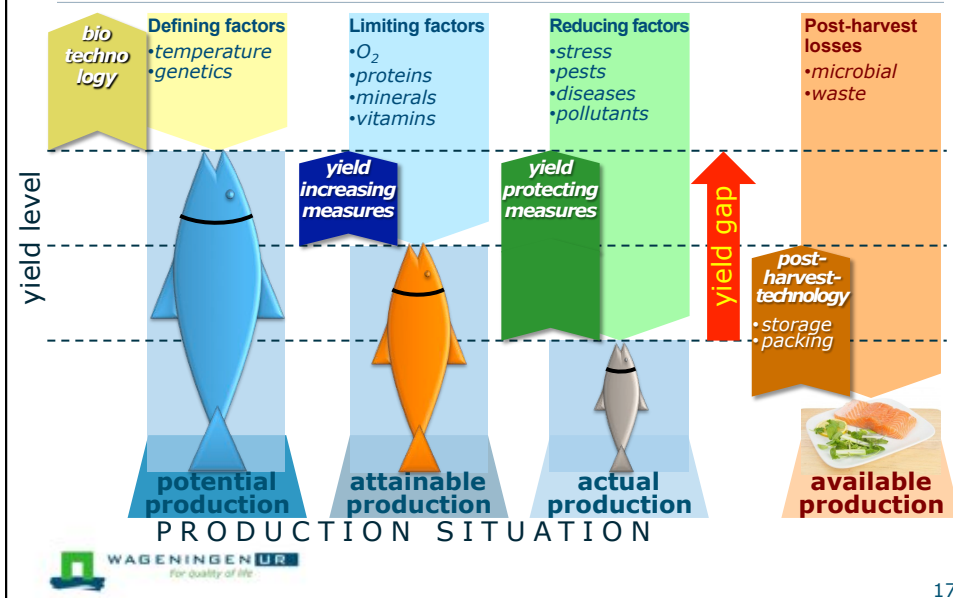
## Production-ecological principles & practice



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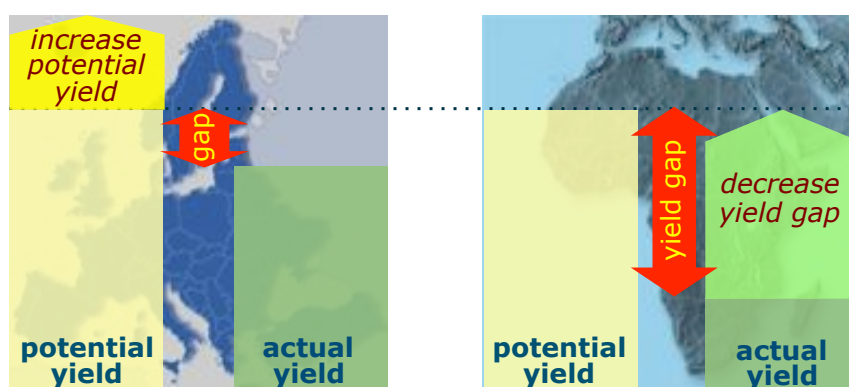


## Production-ecological principles & practice



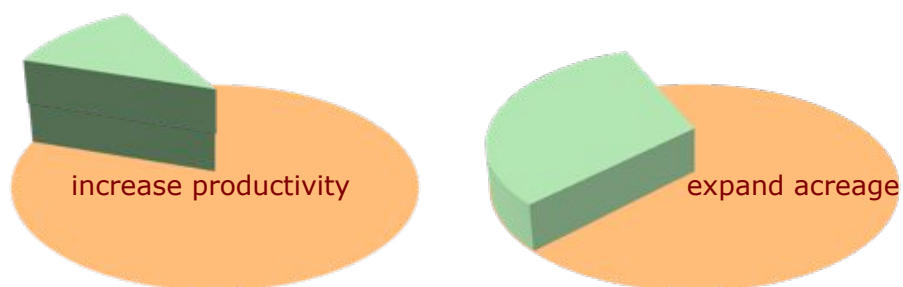
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## Two strategies

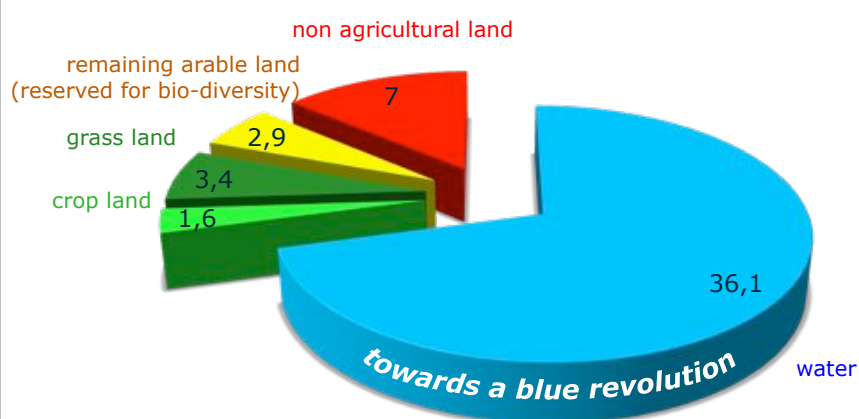


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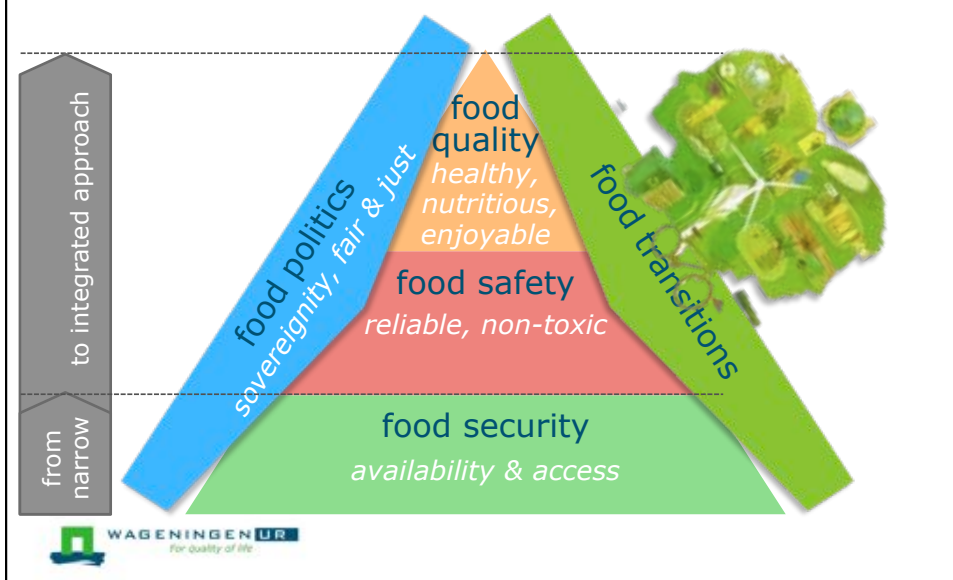
## Step up agricultural production



## Global surface areas (Gha)

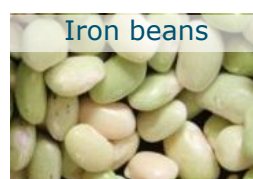


## Sustainable Food Pyramid



## Healthy food

### HarvestPlus

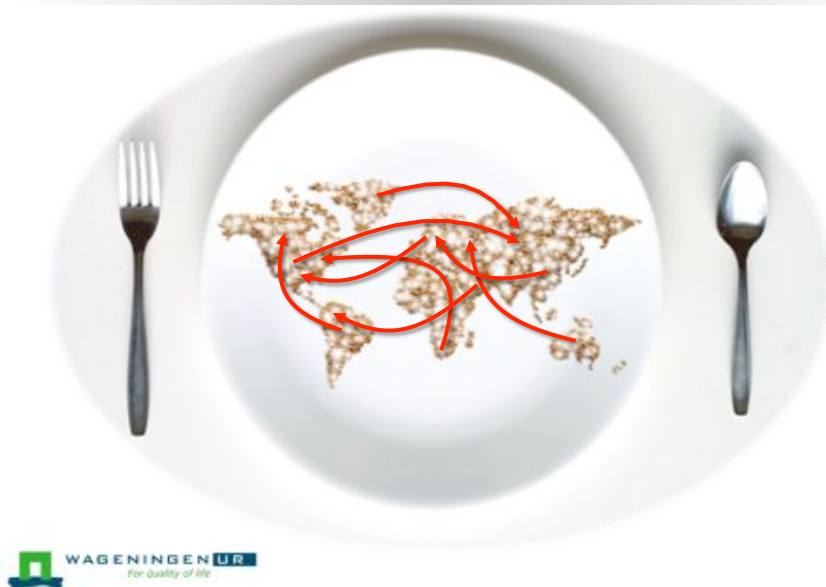


### Nutrigenomics





## Partnerships

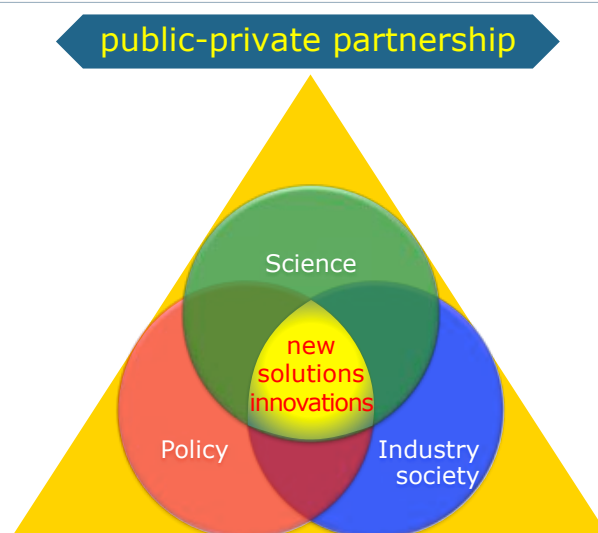


## Positioning the Alliance, we ..

- adopt the challenges
- advance interdisciplinary approaches built on disciplinary excellence
- promote cutting edge approaches
- connect research, education and outreach
- utilize the Golden Triangle



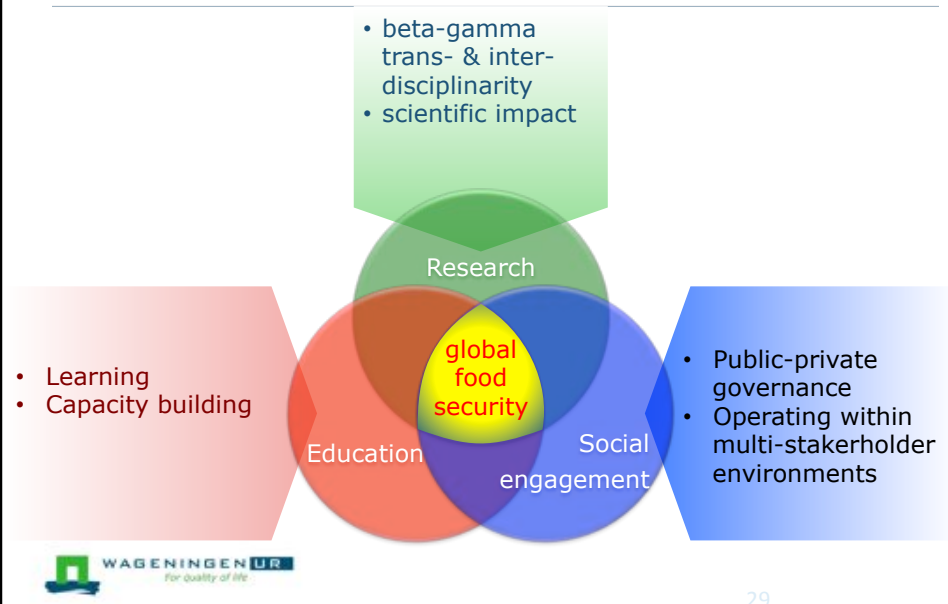
## The golden triangle: *interactive knowledge model*



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## Potential roles of GAFSR members



## Way forward



## Proposed activities

- Strengthen collaboration in research programs
- Exchange and stimulate educational programs, including professional training
- Promote mutual use research infrastructures



## Way of operation

- Organize mutual interaction through information and collaboration
- Promote flexible use of ad hoc and structural partnerships
- Organize an open and inclusive research and knowledge system



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Thanks for your  
attention

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