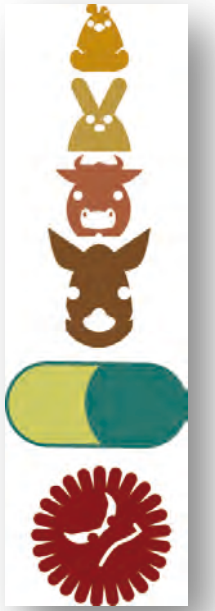
FAO-OIE-WHO Tripartite Positions and Actions on Antimicrobial Resistance (AMR)

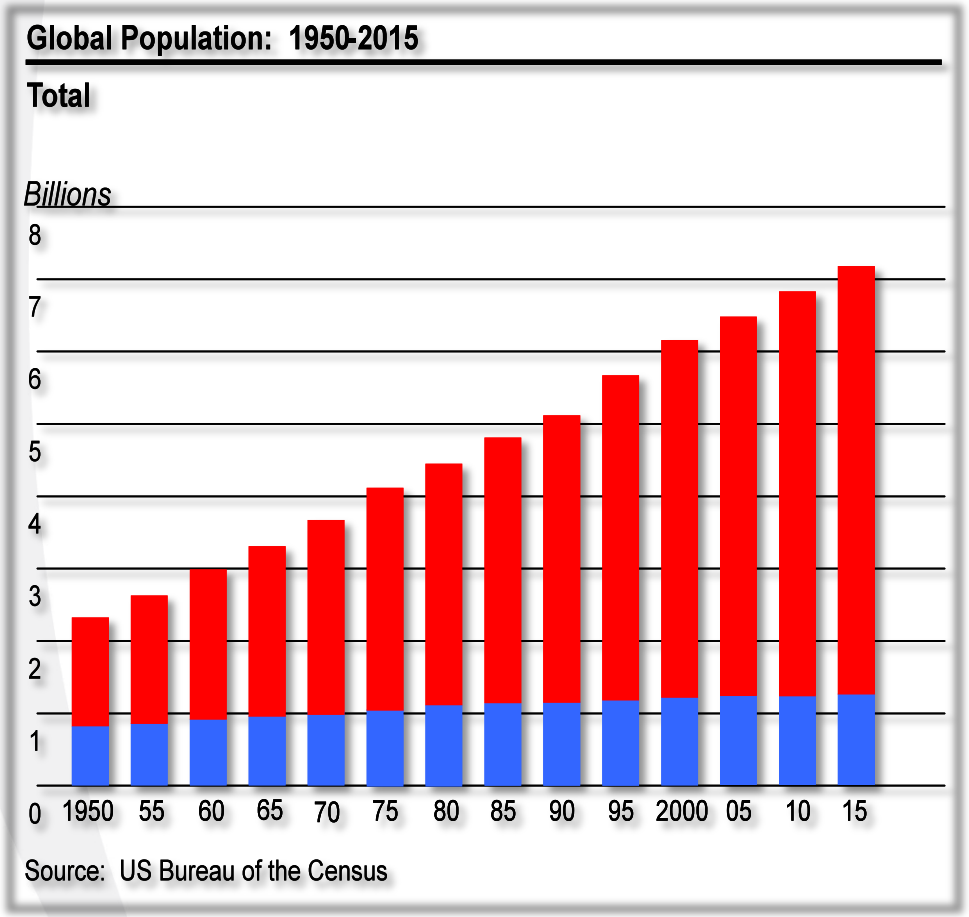


Patrick Otto, FAO, Rome

On behalf of the FAO/OIE/WHO Tripartite Technical Focal Points

Context

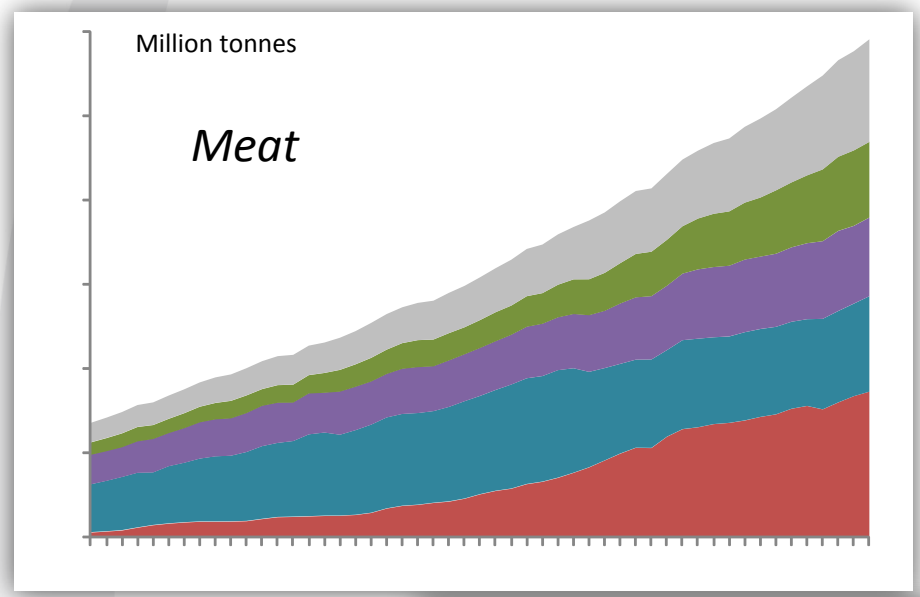
Global demand for food security

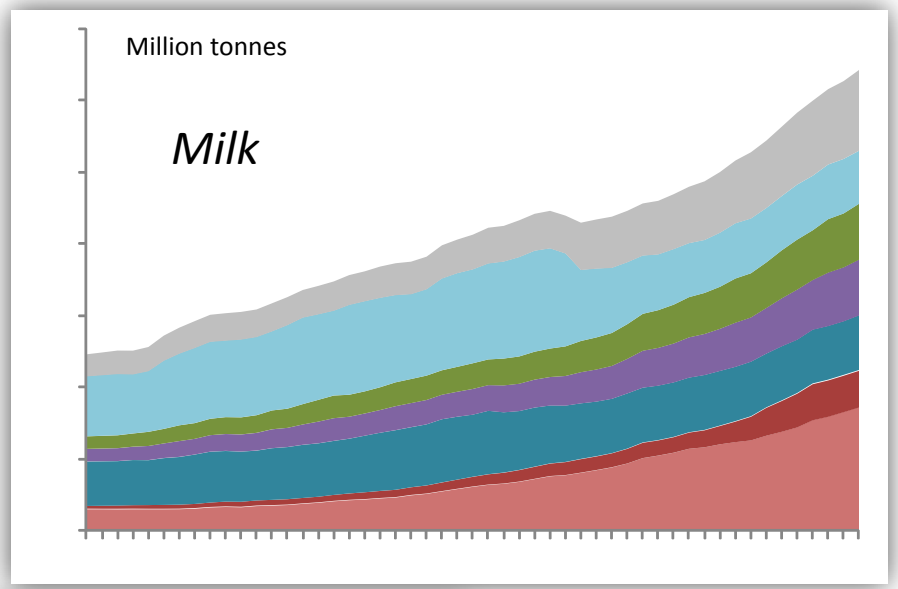


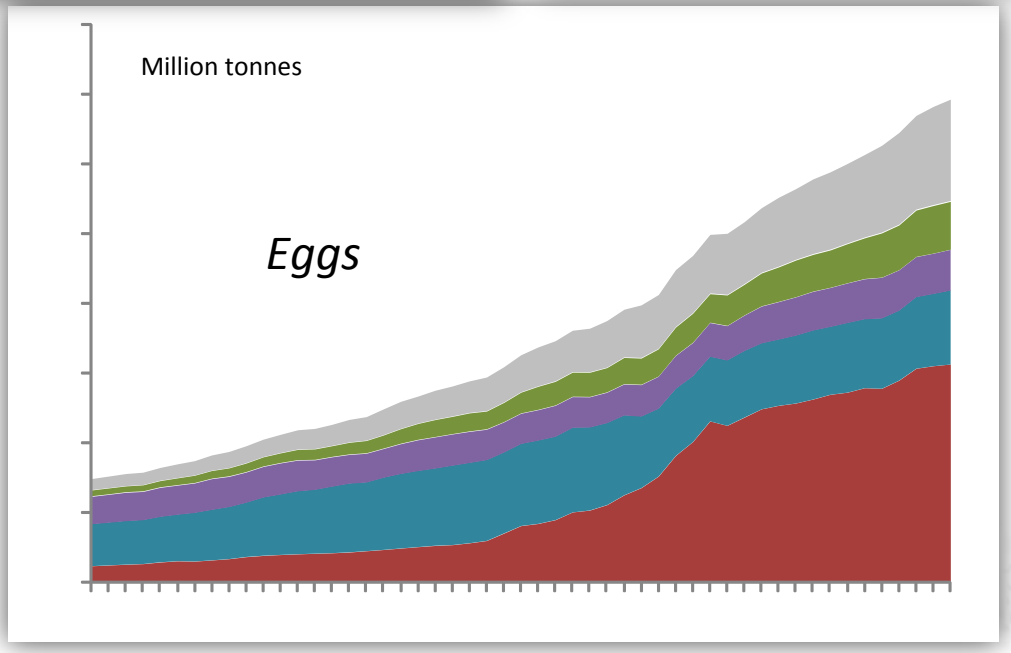
- +1 billion people by 2050
- Demand for animal protein, notably milk and eggs will increase by more than 50%
- Focus on developing / transition countries

World Health Organization

World production

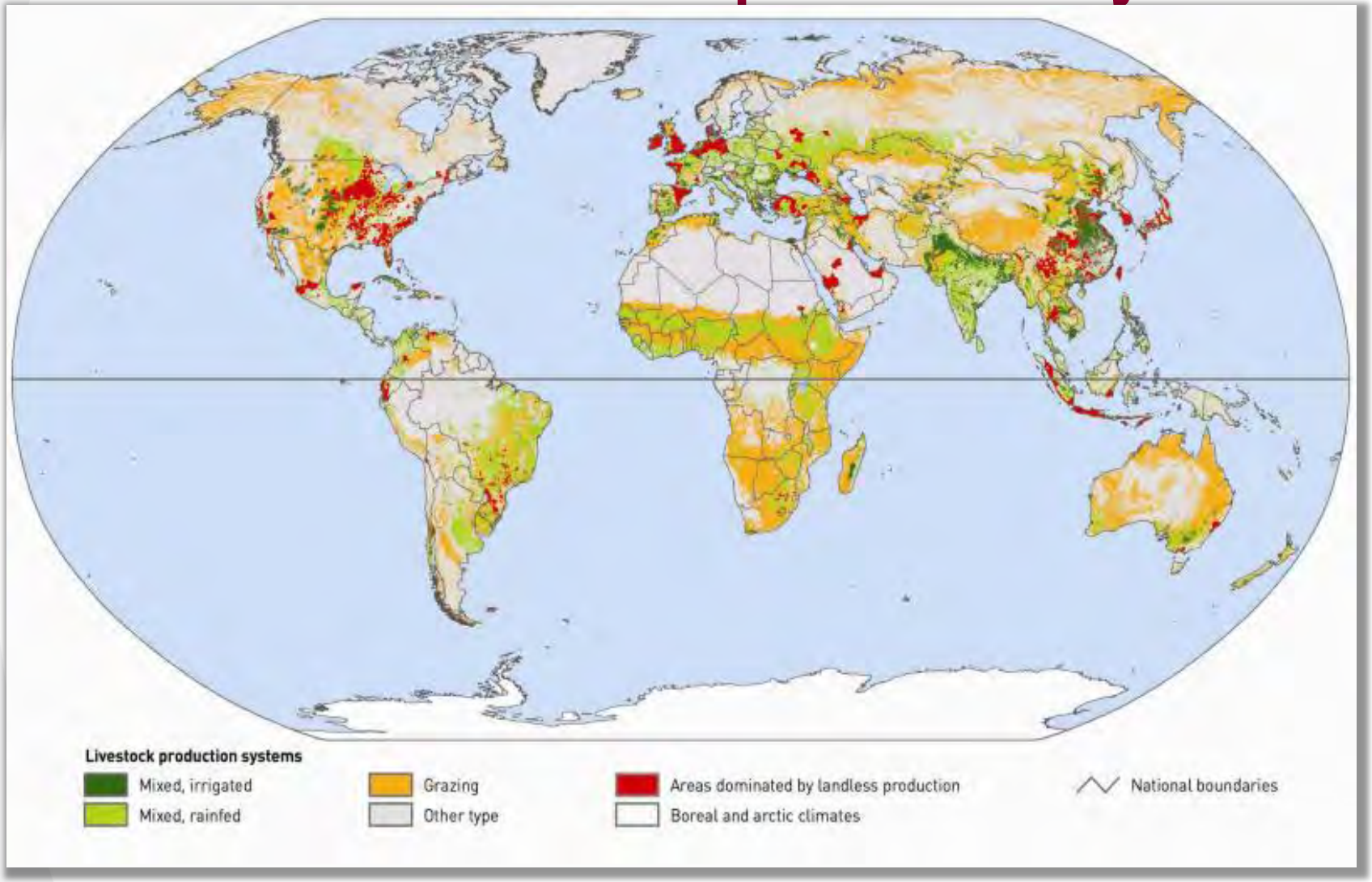






Source: FAOSTAT

Distribution of livestock production systems



Source: The World Bank

Drivers of consumption and future trends

World demand for livestock food products since 1990:

Milk +30% Meat +60% Eggs + 80%

+70% by 2050

- Population growth: +30% since 1990
  +30% or 9 billion people by 2050
- Income growth: +1.5%/year since 1980, +5 to 7%/ year in Asia
  +2%/year by 2050
- Urbanization: 20% in 1900, 40% in 1990, >50% in 2010
  70% of urban people in 2050

Globalisation

- Unprecedented movements of commodities and people are used by pathogens to colonise the planet
- There is no where in the world from which we are remote and no one from whom we are disconnected
- Resistant bacteria travel with humans, animals and commodities and ignore boarders and oceans

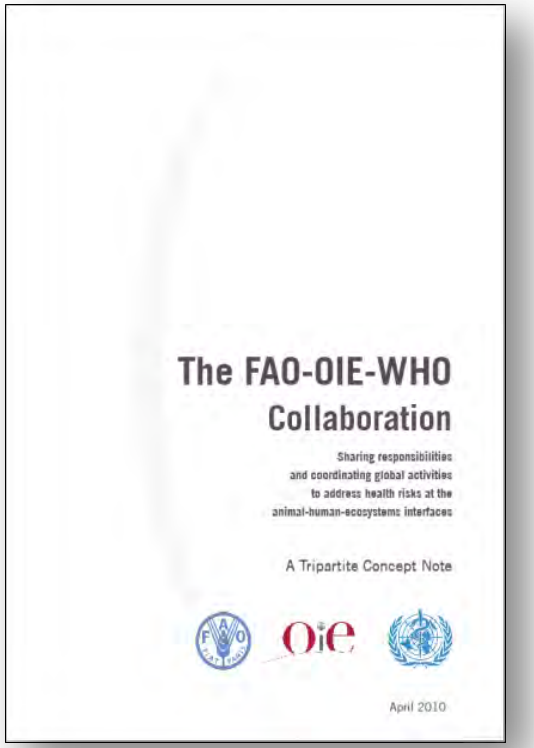
« THE 5 Ts »

Trade,
Travel,
Transport,
Tourism,
Terrorism

World Health Organization

Need for common actions

- A stronger collaboration between WHO, FAO and OIE
- Sharing responsibilities and coordinating global activities to address health risks at the animal-human-ecosystems interfaces
- Three ‘flagship’ topics:
  - Zoonotic influenza
  - Rabies
  - **Antimicrobial resistance (AMR)**



World Health Organization

Why is antimicrobial resistance (AMR) a global concern?

Antimicrobial agents are essential to ensure human health, animal health and welfare, and food security.

- AMR challenges control of infectious diseases
- AMR increases care costs
- AMR compromises health security and damages economies
- There is a lack of coherent global approaches to prevention and containment

The human, animal and plant sectors have a shared responsibility to prevent or minimise the development of antimicrobial resistance by both human and non-human pathogens.

The implementation of the FAO-OIE-WHO Tripartite Agreement/Vision

High Level Technical Meeting, Mexico October 2011

Jointly addressing AMR
(HLTM meeting report)

(http://www.oie.int/fileadmin/Home/eng/Media_Center/docs/pdf/HLTM_exec_summary.pdf)

The problem

- Inappropriate use of antimicrobial agents in human and veterinary medicine has led to AMR, resulting in prolonged illness and increased costs

The solution

- A holistic and coordinated management accross the animal, food and human sectors in different ecosystems and geographic locations
- Improved intersectoral collaboration where regulations of medicines are managed by different entities

Needs (1)

- International standards (to harmonise protocols and methodologies) to monitor AMR and antimicrobial usage
- Surveillance data on AMR and antimicrobial usage to support AMR risk analysis
- Technical capacity (for surveillance of AMR and antimicrobial usage and AMR risk analysis)

Needs (2)

- Coordinated research on effectiveness of policies to achieve AMR risk reduction
- R&D new drugs
- Legislation on access to quality drugs and restricted use
- Good governance of all sectors related to authorisation and use of antimicrobials (lab expertise, international standards and legislation development and implementation, surveillance and monitoring)

Steps for action at country level (1)

- Formal mechanisms of collaboration between ministries/ authorities involved (health, agriculture, livestock, food, environment)
- Concordance between veterinary and human medicines regulation, approval, prescription control and monitoring of use
- Development and adoption of international standards and protocols to facilitate information sharing and harmonisation in surveillance of AMR and antimicrobial use in humans and animals
- Surveillance programmes to monitor current and emerging AMR patterns involving animal and human health sectors

Steps for action at country level (2)

- Institutional and technical capacities for AMR and antimicrobial usage monitoring and surveillance; and AMR risk analysis
- Multidisciplinary task forces of Authorities involved to act on surveillance data
- Joint evaluation programmes on the effectiveness of management actions to reduce the prevalence of AMR in human and animal sectors
- Common messages and outreach

Conclusions: actions at national level

- Governance
- Legislation
- Good quality information
- Capacity building
- Risk assessment
- Close cooperation

Ongoing and future global collaboration

Tripartite Annual Executive & Coordination Meetings

Paris, 1 - 2 February 2012, OIE Headquarters:

Tripartite Strategy: AMR one of the priority topics

- R13- Headquarters to **nominate focal points for AMR** in the three organisations to define and implement the immediate next steps for collaboration.
- R14- **Scale up AMR** to address all sectors. Focus should include legislation and capacity building.
- R15- That the **Veterinarian, or Para-Professional under Veterinary authority, be considered as key players for using antibiotics** in order to better control their use.
- R16- Existing HQ Tripartite Focal Points on AMR **work on an Action plan** addressing the following items: legislation, capacity building, needs of resources for poor countries, misuse and illegal use.

Tripartite Annual Executive & Coordination Meetings

Rome, 6 - 7 February 2013, FAO Headquarters

Antimicrobial Resistance

Conclusions:

- Prudent and responsible use of antimicrobial agents in both humans and animals is considered a public good
- The three organizations have officially nominated technical focal points for antimicrobial resistance who will facilitate the implementation of immediate next steps for collaboration
- Recommendations R14, R15 and R16 from the Tripartite meeting on 1-2 February 2012 are still a priority

Tripartite Annual Executive & Coordination Meetings

Rome, 6 - 7 February 2013, FAO Headquarters

Recommendations:

- Continue to work together on AMR to protect human and animal health
- **Support the joint AMR capacity building** initiatives as agreed by the Tripartite
- **Speak with one voice and take collective action** through a coordinated approach with shared responsibilities to tackle antimicrobial resistance worldwide

Action:

- **AMR focal points to prepare an action plan** for the Tripartite in view of the development of a joint Tripartite global strategy on the containment of AMR

FAO FIAT PANIS OIE World Health Organization

Tripartite technical focal points for antimicrobial resistance

- Technical Focal Points met three times
- Identified common areas for cooperation
- Developement of a tripartite work plan is ongoing
- Common messages are identified
- Mutual participation in relevant *ad hoc* Groups, meetings and trainings

OIE Vision – One Health

- Antimicrobial resistance
  - Antimicrobials are a precious necessity for animal health and welfare and public health
  - Prudent and responsible use in animals: OIE Standards should be applied

Responsible and prudent use

Objective

- Prevent or reduce the transfer of resistant bacteria within animal populations, their environment and from animals to humans
- Contribute to maintaining the efficacy and usefulness of antimicrobial agents used in animal and human medicine
- Protect consumer health by ensuring the safety of food of animal origin with respect to residues of antimicrobial agents
- Develop antimicrobial resistance surveillance and monitoring programmes through sampling
- Refer to the OIE List of critically important antimicrobials in veterinary medicine
- Follow up of national flow and use

Responsible and prudent use

Responsibilities

- **Of the Competent Authorities**
  - Ensuring regulation of production, import and distribution
  - Granting marketing authorisation => specify terms of authorisation (criteria for safety, quality, efficacy, etc.) and provide information to vets
  - Combat manufacture, advertisement, trade, distribution and use of unlicensed/counterfeit products
  - Quality control of products
  - Control over prescription, supply, administration
  - Ensure that the environmental impact of antimicrobial use is restricted to a minimum.

Responsible and prudent use

Responsibilities

- **Of distributors**
  - For antimicrobial agents only by prescription and delivery from a veterinarian
  - Detailed records

- **Of veterinarians**
  - Promotion of good farming practices to minimise the need for antimicrobial agents
  - Prescription and delivery only to animals under their care; when necessary; precise indications (including withdrawal period)
  - Appropriate choice (=> target pathogens) of antimicrobial agents for efficacy of treatment
  - Detailed records

Responsible and prudent use

Responsibilities

- **Of food animal producers**
  - Implement health & welfare programmes with involvement of a vet.
  - Use antimicrobial agents only by prescription and delivery by a well qualified vet.
  - Comply with withdrawal periods

- **Of Veterinary Statutory Bodies**
  - To be established by law to define and control professional conduct and veterinary ethics of veterinarians.

Conclusion

We need:

- More cooperation between international organisations
- International solidarity to support developing countries particularly in good governance aspects including Veterinary Service legislation
- More risk assessment and banning of non-priority practices in animals
- More research and public-private partnerships
- Support to veterinary services, including the organisation and control of the private sector, and laboratories
- More awareness raising at all levels

Conclusion: Antimicrobial use in animals

Problems related to AMR are linked to antimicrobial use in any environment, including human and non-human usages.
Antimicrobial resistance is not a recent phenomenon, but it is critical to take action now to keep antimicrobial agents effective and useful to combat disease.

- Animal health and welfare must be sustained
- Food security and food safety must be ensured
- Practices at risk such as the use of antimicrobials for animal growth promotion should be carefully evaluated
- No universal optimal solution for the delivery of antimicrobials at farm level worldwide, The well qualified veterinarian is the key actor
- International solidarity is crucial in a globalised world

Thank you
for your attention

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