

**“Partnerships for Achieving  
Chemical Safety in Armenia”, Yerevan 29-30  
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Health System and environmental health

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**HEALTH SYSTEM IS “THE ENSEMBLE OF ALL ORGANIZATIONS, INSTITUTIONS AND RESOURCES THAT ARE DEVOTED TO PRODUCING HEALTH ACTIONS”**

**HEALTH ACTION IS “ANY EFFORT, WHETHER IN PERSONAL HEALTH CARE, PUBLIC HEALTH SERVICES OR THROUGH INTERSECTORAL INITIATIVES, WHOSE PRIMARY PURPOSE IS TO IMPROVE HEALTH”**



**UNIVERSITY**



**FINANCES**



**LEGAL AND POLITICAL SYSTEM**

**TRAINING**



**DATABASES**

**HOSPITALS**

**POLYCLINICS AND CLINICS**




**EMERGENCIES**



**INDIVIDUALS**




# Goals of the Health System

- ◆ Better health (both level and equity)
  - ◆ Responsiveness to the expectations of the population
  - ◆ Equity in financial contribution with protection against financial risk
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- A decorative graphic at the bottom right of the slide, consisting of a stylized mountain range silhouette in shades of teal and blue.

# Health system boundaries

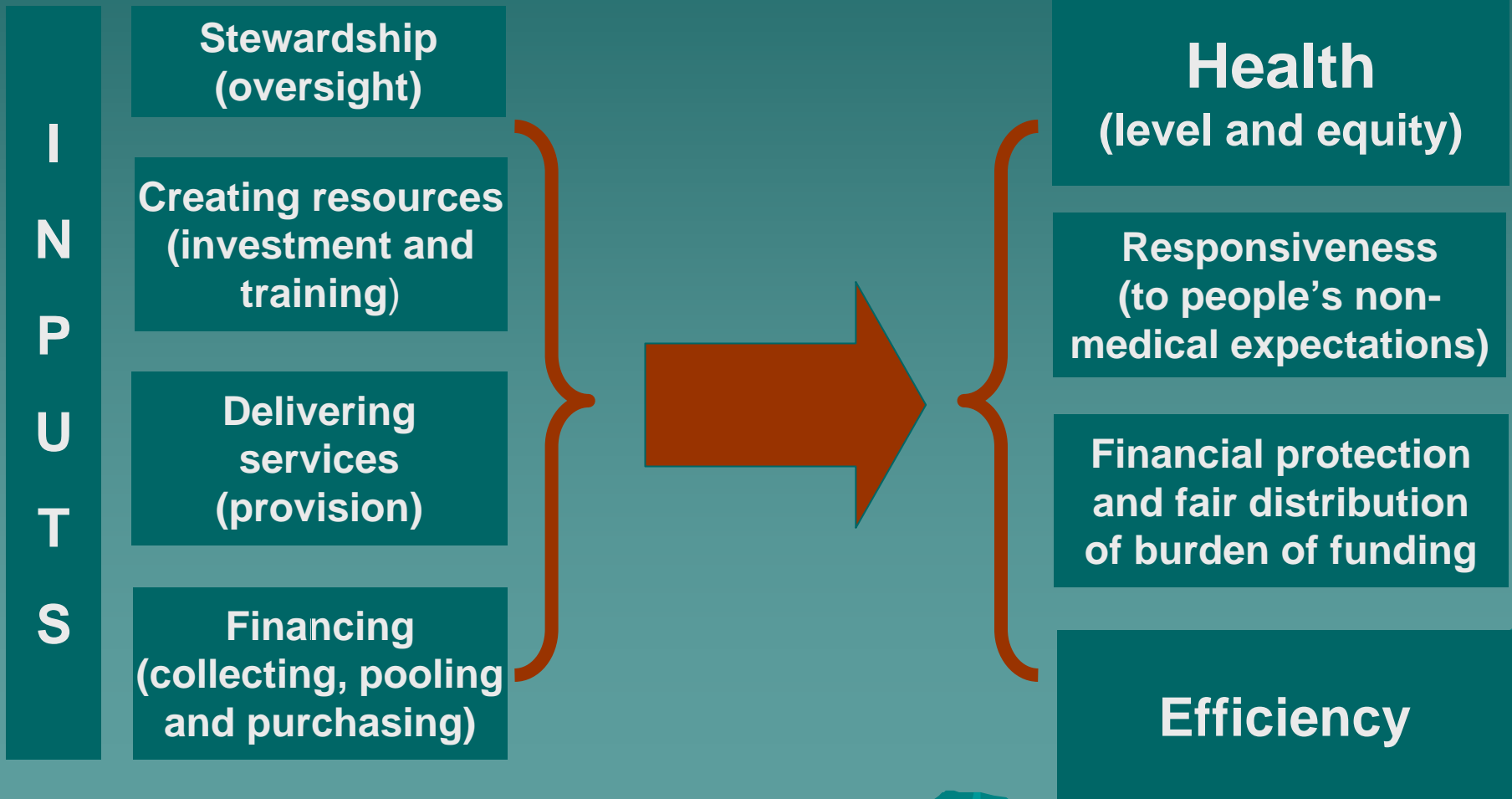
The primary intent criterion: all actors, institutions and resources whose primary intent is to improve health



# Health systems framework

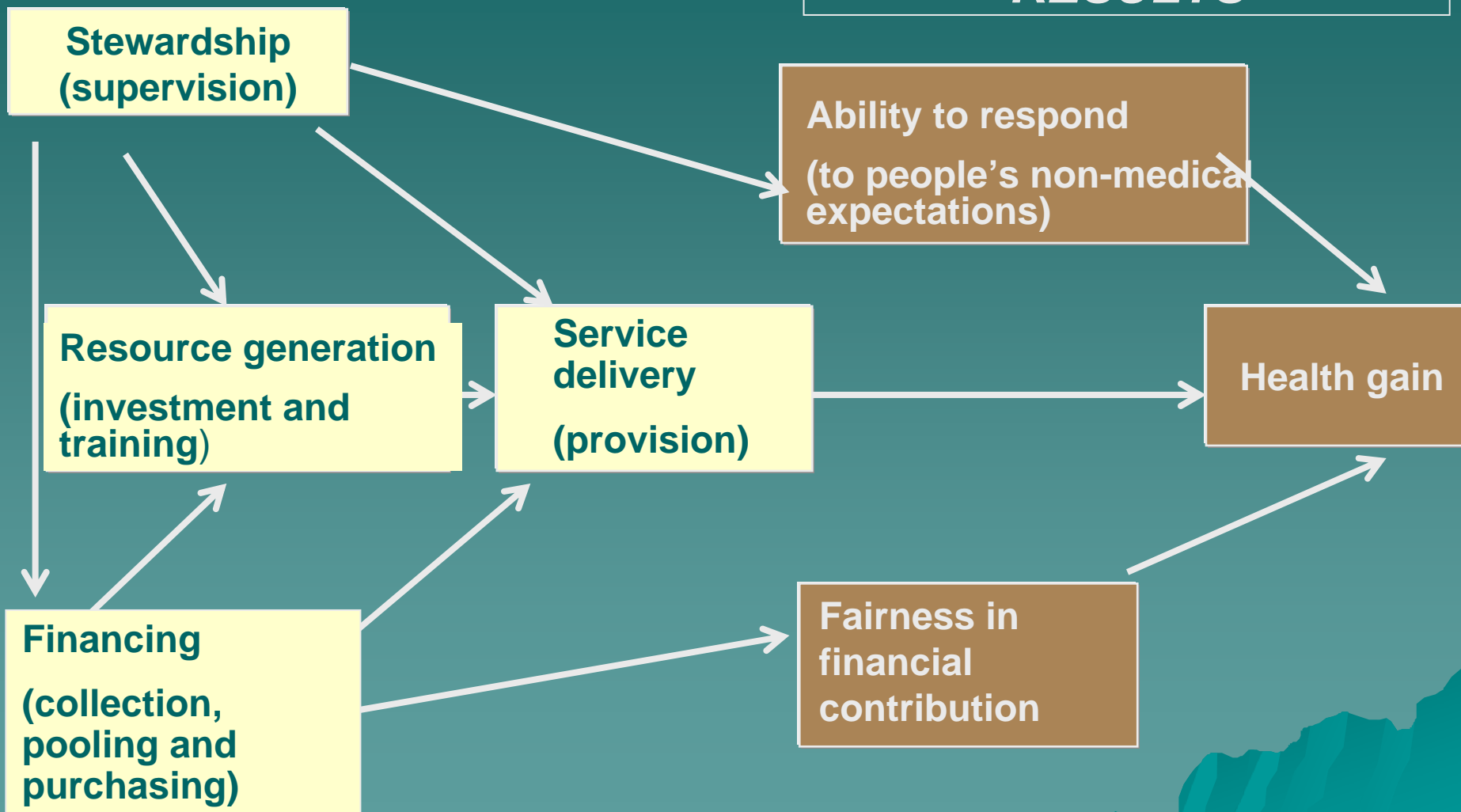
## FUNCTIONS THE SYSTEM PERFORMS

## GOALS / OUTCOMES OF THE SYSTEM

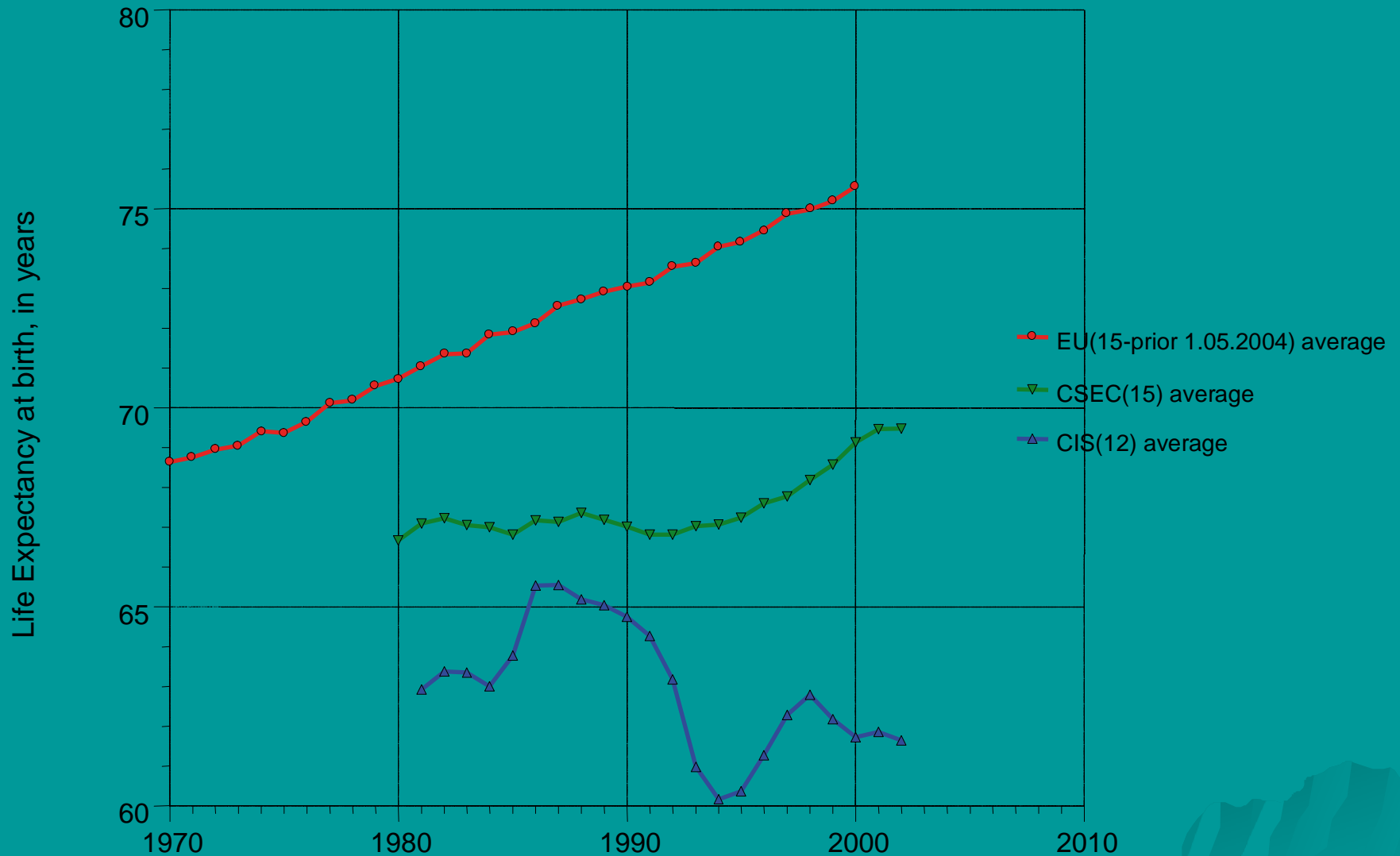


## FUNCTIONS PERFORMED BY THE HEALTH SYSTEM

## SYSTEM GOALS / RESULTS

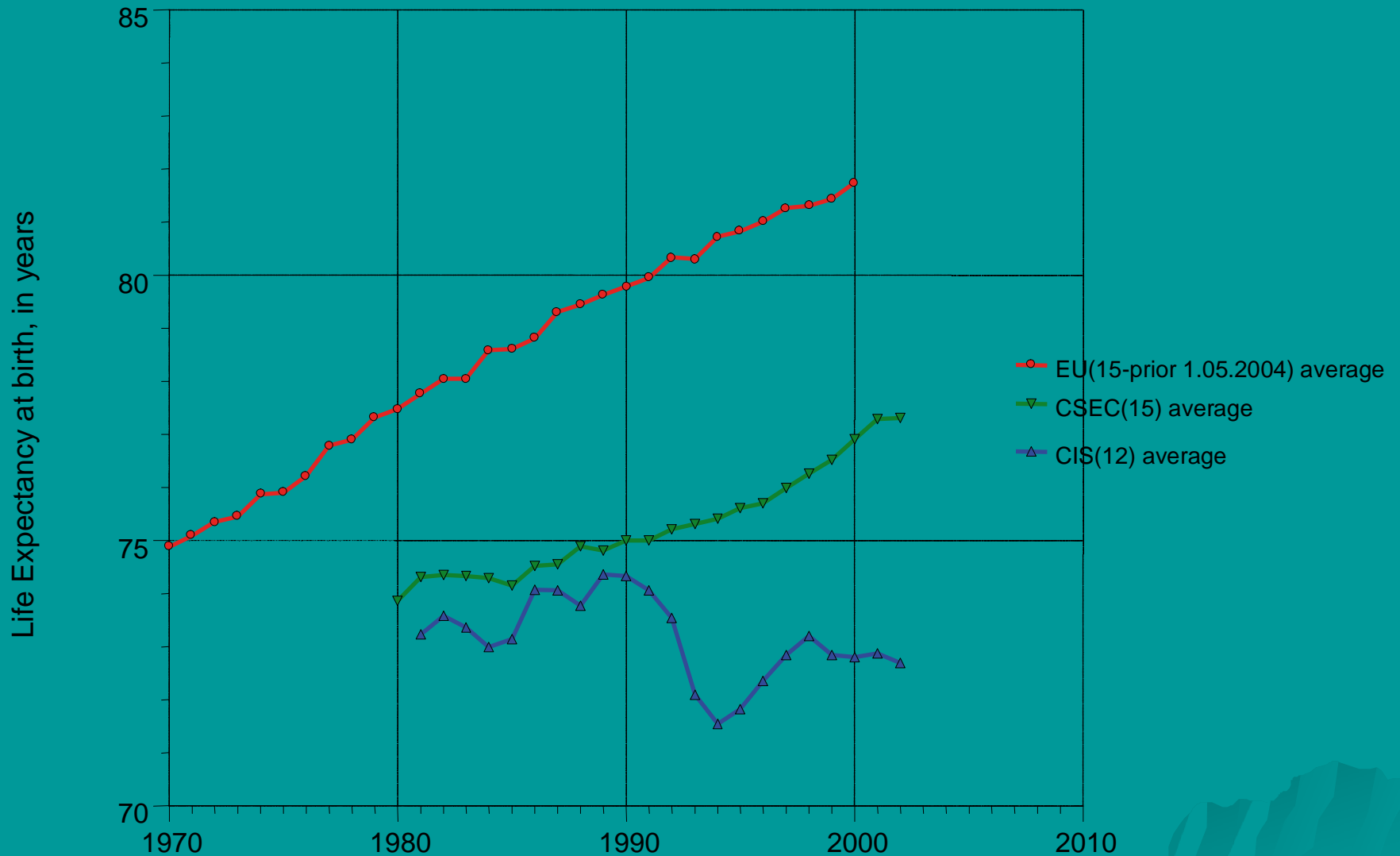


# Life expectancy at birth, males, 1970-2002

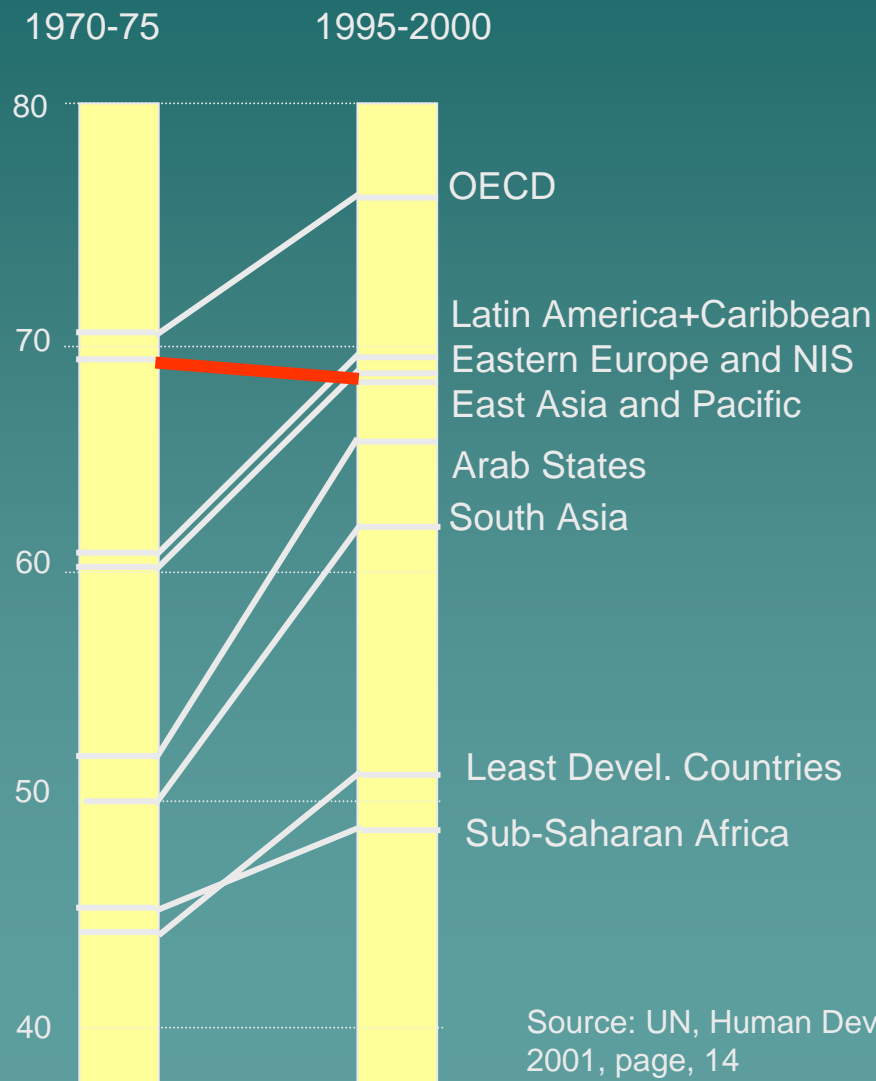




# Life expectancy at birth, females 1970-2002



# Life expectancy at birth (years)



Source: UN, Human Development Report 2001, page, 14



Of course, impoverishment explains a big part of these results...

but not all!

# Need to Learn From Experience

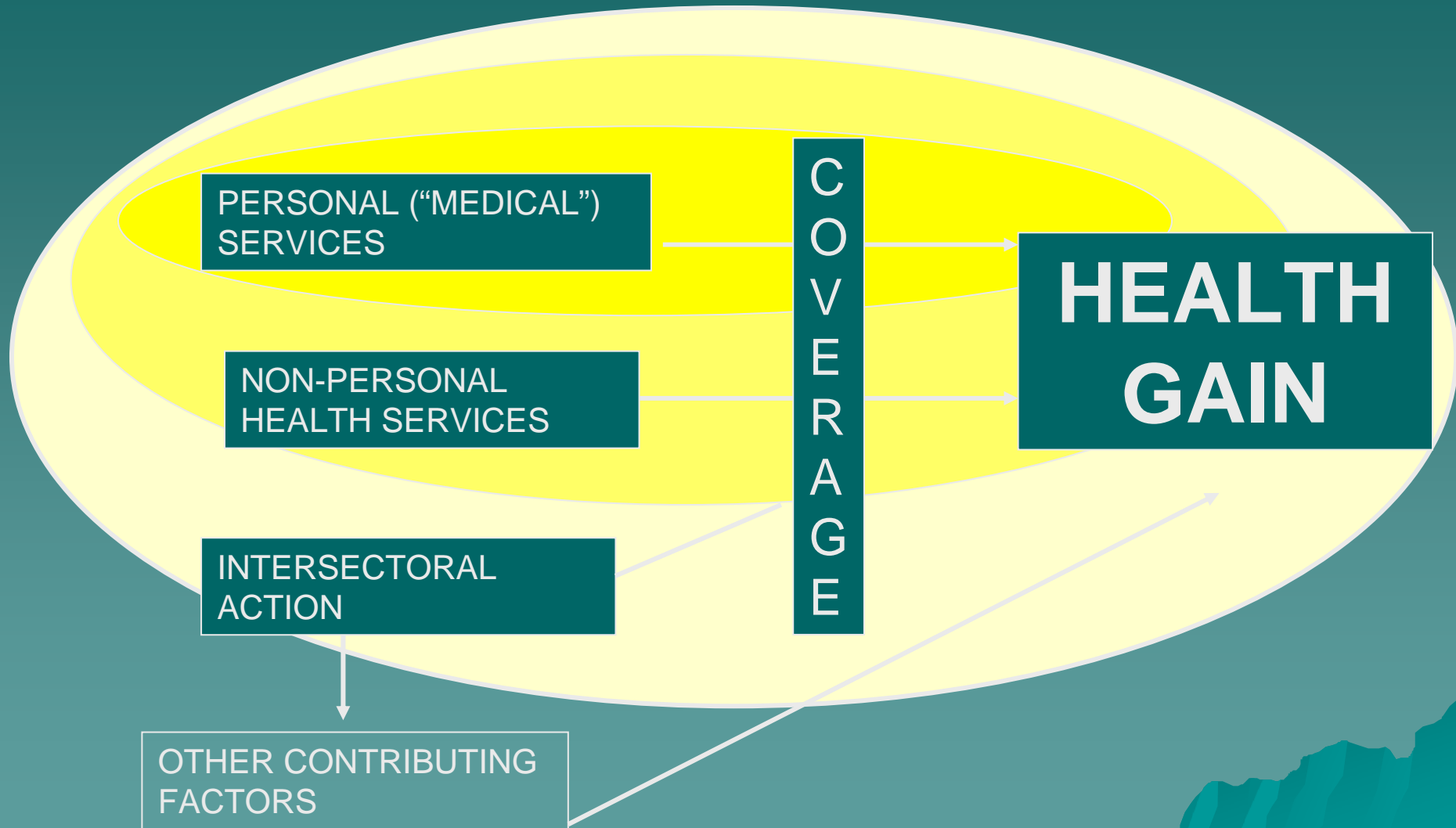
Based on the findings in the Western world during the 1970s the international community interpreted the role of Health Systems as of not top importance for improving health



# It is **NOT** *health care only*!!

Advances in the fight to reduce infant and maternal mortality, etc COULD NOT have been achieved without proper enrolment schemes, health education, community mobilization planning, funding, citizen's registers, and the many other things that constitute a health SYSTEM!

# Boundaries of the health system



# Two main domains of public health

I – Non personal services: health promotion and disease prevention (educational, regulatory and other efforts, communicable diseases control, emergency planning including prep. against bio-terrorism, environmental incidents, etc.)

II – Personal health services (work contributed by public health to the planning, evaluation and quality assurance of the health service provision.

# Burden of Disease

Disability-adjusted life years (DALY), a summary measure that accounts for the impact both of “premature” death (i.e. the years of life lost due to premature death, or YLL), and of health problems among those who are alive (i.e. the number of years lived with a disability, or YLD)



# Global burden of disease

- ◆ Ever increasing morbidity and mortality from NCDs
- ◆ Environmental exposures – important contributors to the global burden of disease, especially among children and adolescents

# WHO reports that...

1/3 of the total burden of disease in 0-19 year old children is attributable to indoor and outdoor air pollution, unsafe water conditions, lead exposure and injuries (WHO, 2002)

# 4 CEHAPE goals

Confront the health burden arising from:

1) lack of adequate water and sanitation;

2) mobility-related and transportation-related injuries, as well as unintentional injuries;

3) indoor and outdoor air pollution; and


4) hazardous chemicals and occupational hazards.

# Information need

- ◆ For policy-makers, disease burden estimates provide an indication of the health gains that could be achieved by targeted action against specific risk factors.
- ◆ The measures also allow policy-makers to prioritize actions and direct them to the population groups at highest risk.

# What can be done to increase Chemical Safety for Children?

## ACTIONS

- ◆ Education and training
  - ◆ Prevention of exposure and reduction of risk
  - ◆ Data and research needs
  - ◆ Indicators of environmental health
- 

# Prevention of exposure and reduction of risk (examples) - I

- ◆ Promote non-chemical alternatives, and integrated pest management strategies which include safe and judicious use of pesticides.
- ◆ Promote clean production and adopt pollution prevention and other appropriate management strategies that prevent or reduce children's unsafe exposure to chemicals, in particular to those chemicals of highest concern.

# Prevention of exposure and reduction of risk (examples) - II

- ◆ Ensure that effective safety information labels are included on consumer products that are potentially hazardous to children.
- ◆ Strengthen community right-to-know where children are potentially exposed so that parents and others responsible for children have adequate and reliable information on emissions and discharges and on the safety and safe use of products

# Education and training (examples)

- ◆ Raise the awareness of decision-makers about the risks to children's health and development associated with chemical use and encourage policies that take into account any specific vulnerabilities to chemicals that children may have.
- ◆ Train health professionals about children's unique vulnerabilities to certain chemicals and the risk of chemical exposures in different settings, the most common exposure pathways, as well as how to diagnose, identify the cause, prevent and treat exposures.



# Data and research needs (examples)

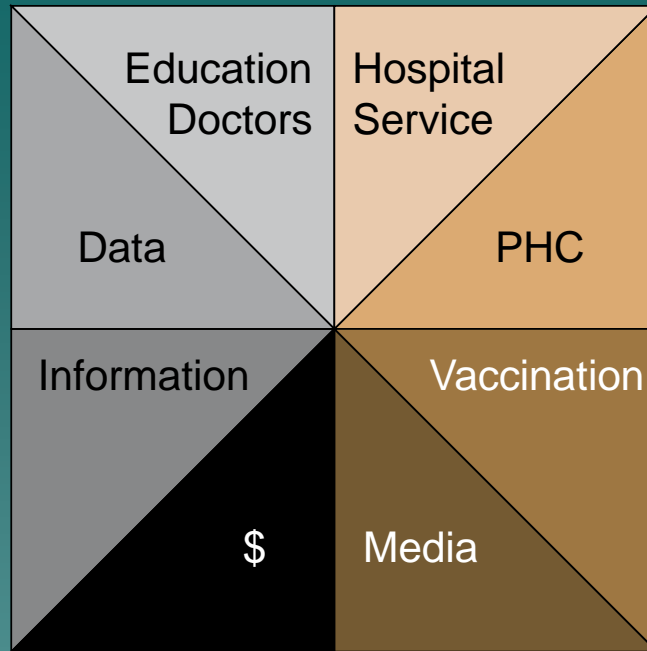
- ◆ Increase and support further scientific research on the link between chemical exposure and health outcomes in different age groups, and in different settings.
- ◆ Continue to improve and implement risk assessment approaches that account for child-specific issues.
- ◆ Encourage donors to fund innovative research incorporating children and chemicals into development assistance programmes, and taking the opportunities offered through existing convention funding mechanisms to address children and chemicals issues.

# Indicators on environmental health (examples)

- ◆ Develop appropriate indicators of chemical safety and children's health.
- ◆ Use appropriate indicators of chemical safety and children's health to measure progress in protecting children from chemical hazards and make further decisions

**So, what should be done to  
accelerate health gain?**





There is a need to put together ALL resources and institutions in charge of developing actions whose primary purpose is to improve health... and move forward with renewed focus

# This includes:

- the traditional personal care structures (clinics, ambulatories, hospitals, laboratories, etc)
- all public health structures in charge of health protection, disease prevention, etc.
- all health promotion and health education structures
- all structures in charge of developing inter-sectoral actions for health
- all organizations having direct contact with the communities (like civil societies and NGOs)
- donors

THANK YOU