

HNP and the Poor: Critical Factors Beyond the Health Sector

Session 5

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Motivation

- **Health, nutrition and population outcomes are affected by risk factors at many levels, including the health sector and beyond.**
- **These factors may exacerbate or reduce inequality in HNP outcomes.**
- **We need to be able to:**
 - **measure differences in risk**
 - **identify interventions to change them**
 - **set priorities among interventions**

Session Objectives

- **Identify and measure impact of factors beyond care that influence HNP outcomes.**
- **Identify actions to address these factors through policy change and program design.**
- **Track how these actions have helped to improve HNP outcomes for the poor.**

Session Outline

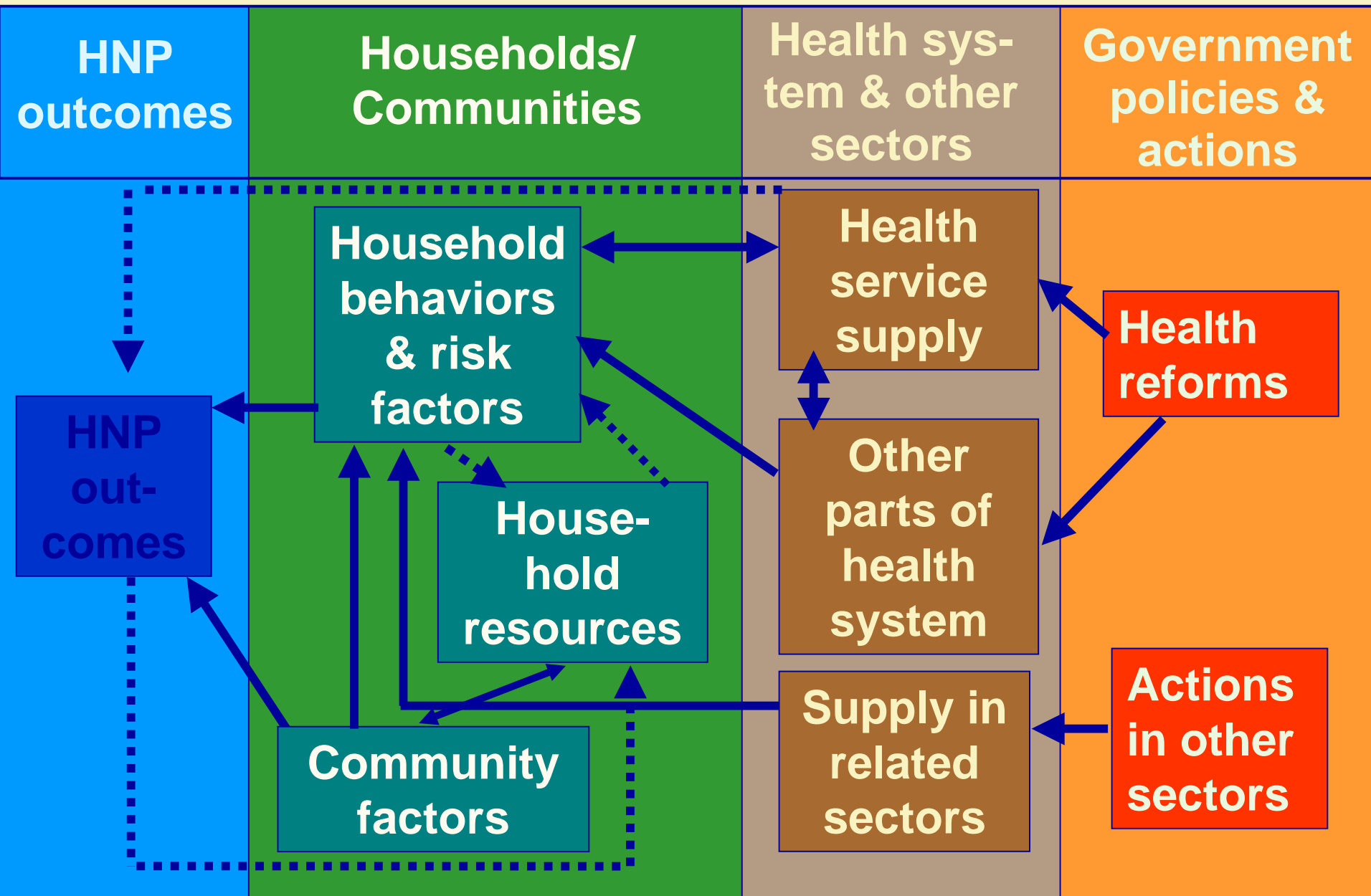
- Review pathways framework
- Review life-cycle model and risk factors
- Household behaviors and resources
- Community factors
- Supply in other sectors
- Government policies and actions in other sectors

Pathways to HNP Outcomes

The “pathways” framework helps us identify factors affecting risks and barriers to better HNP outcomes at three levels:

- households and communities**
- the health system and other sectors affecting health outcomes**
- government policies and actions**

Pathways to Improved HNP Outcomes

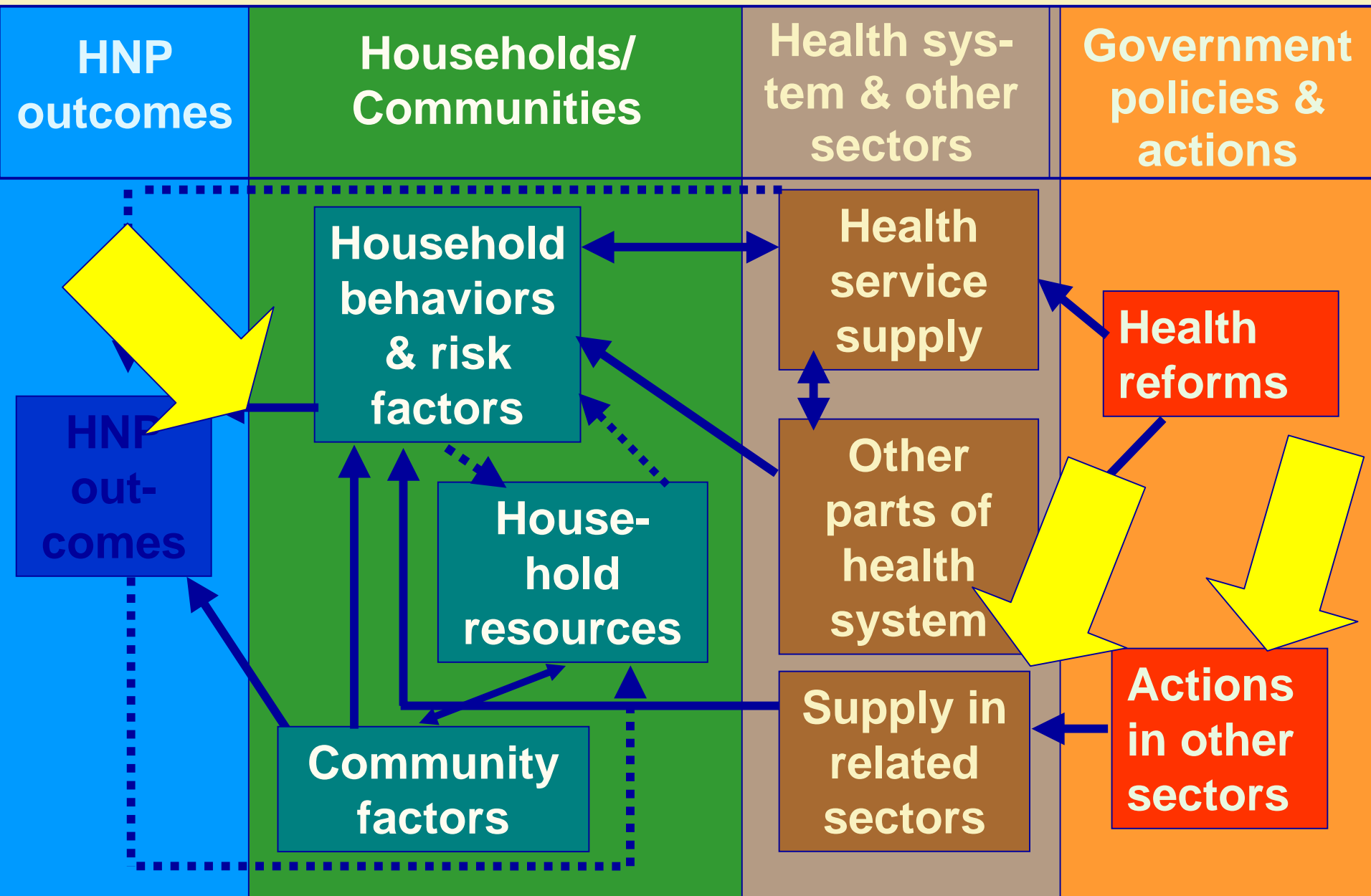


Factors Outside the Health System

The module will focus on the following parts of the framework:

- forces outside the health system affecting households & communities**
- actions in other sectors that affect health outcomes**
- government policies and actions**

Pathways to Improved HNP Outcomes



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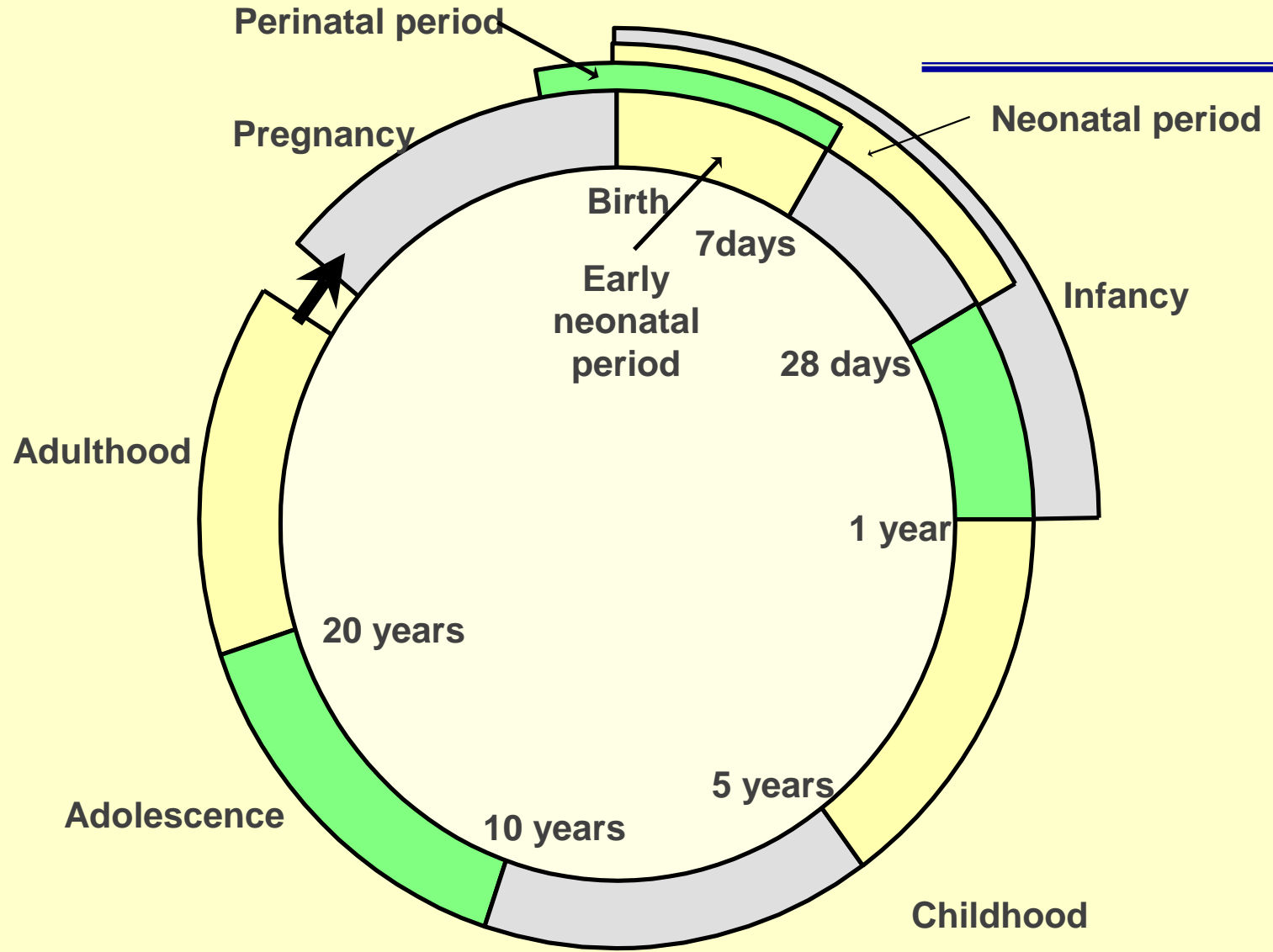
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Life-cycle view of HNP Outcomes

The life-cycle framework recognizes that risks and barriers to better HNP outcomes for the poor differ as people experience:

- birth, infancy and childhood**
- youth and initiation of sexual activity**
- reproductive years, pregnancy**
- mature adulthood and old age**

Main stages in the HNP Life Cycle



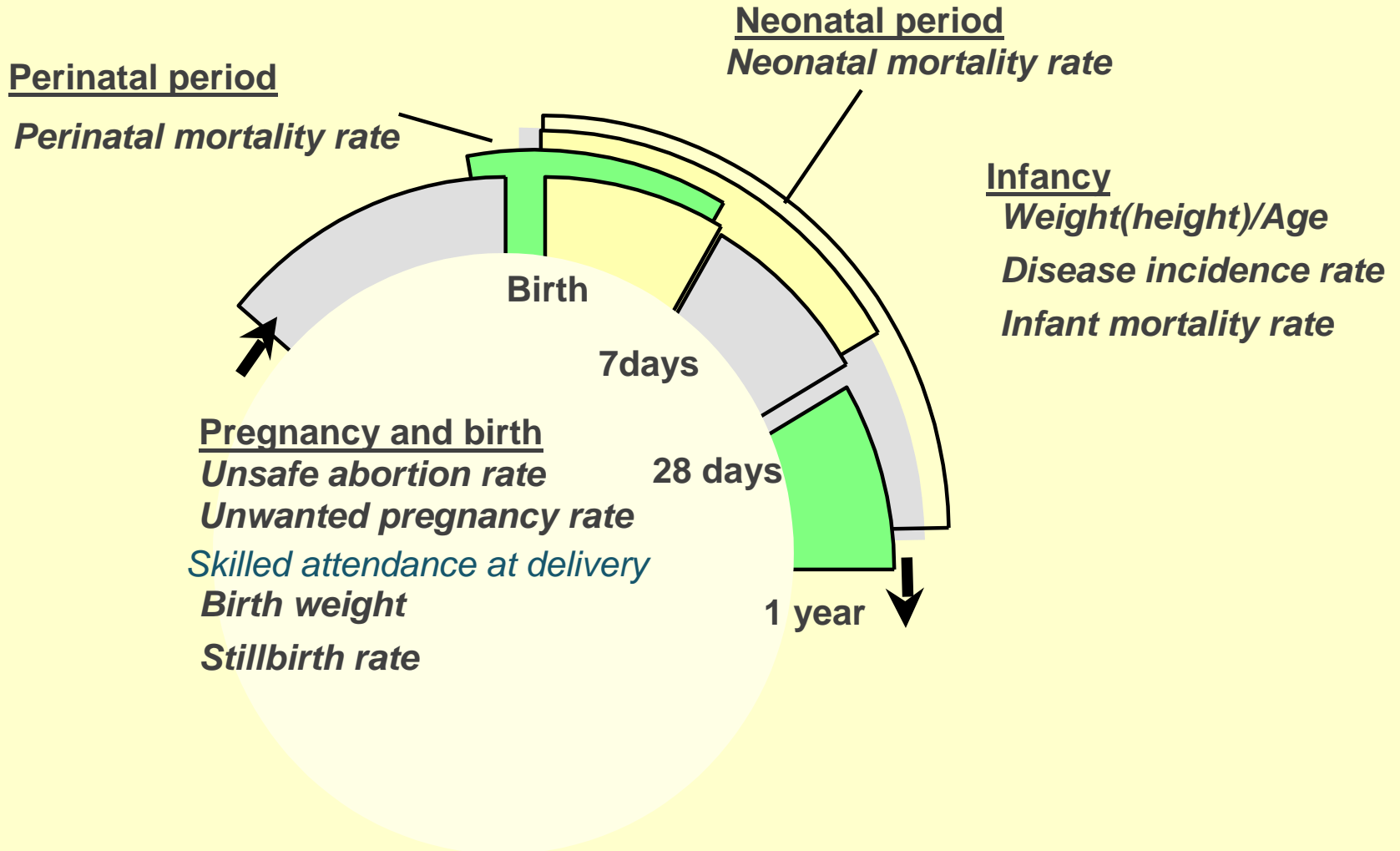
Addressing Risk Factors

- **How do they affect HNP outcomes?**
- **Are risks greater for the poor?**
- **Can they be measured?**
- **Can anything be done to mitigate risks?**
- **How can we choose among the many issues and possible interventions?**
- **How can we evaluate impact of interventions on HNP status of the poor?**

Pregnancy and Early Life Risks

- **Poor women and children experience greater risks during pregnancy, delivery and early life.**
- **Risks during pregnancy and early life are exacerbated by behaviors and by limited household resources.**
- **Outcome measures (maternal and child mortality) are worse for the poor.**

Pregnancy and Early Life Outcomes



Take Home Messages

- **Risk factors vary through the life cycle**
- **Interventions need to take account of this variation**
- **Life-cycle approach focuses on outcomes for individuals rather than inputs**
- **Come back tomorrow for more on the life-cycle approach**

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Household and Community Factors Matter

- Household behaviors and risk factors such as nutritional practices and demand for health care
- Household resources, e.g. education, housing, water & sanitation
- Community factors, including social values and infrastructure

Household Behaviors Affect HNP Outcomes

HNP
outcome

Households/
Communities

Household
behaviors
& risk
factors

Household behaviors and risk factors:

Nutrition behaviors, food safety

Health-care demand

Control of money and spending
decisions of household

HNP
out-
comes

Note: health system has little influence on underlined factors;
for others it may be a mix of forces

Household Behaviors and Low Birth Weight

HNP
outcome

Households/
Communities

Household
behaviors
& risk
factors

Low
birth
weight

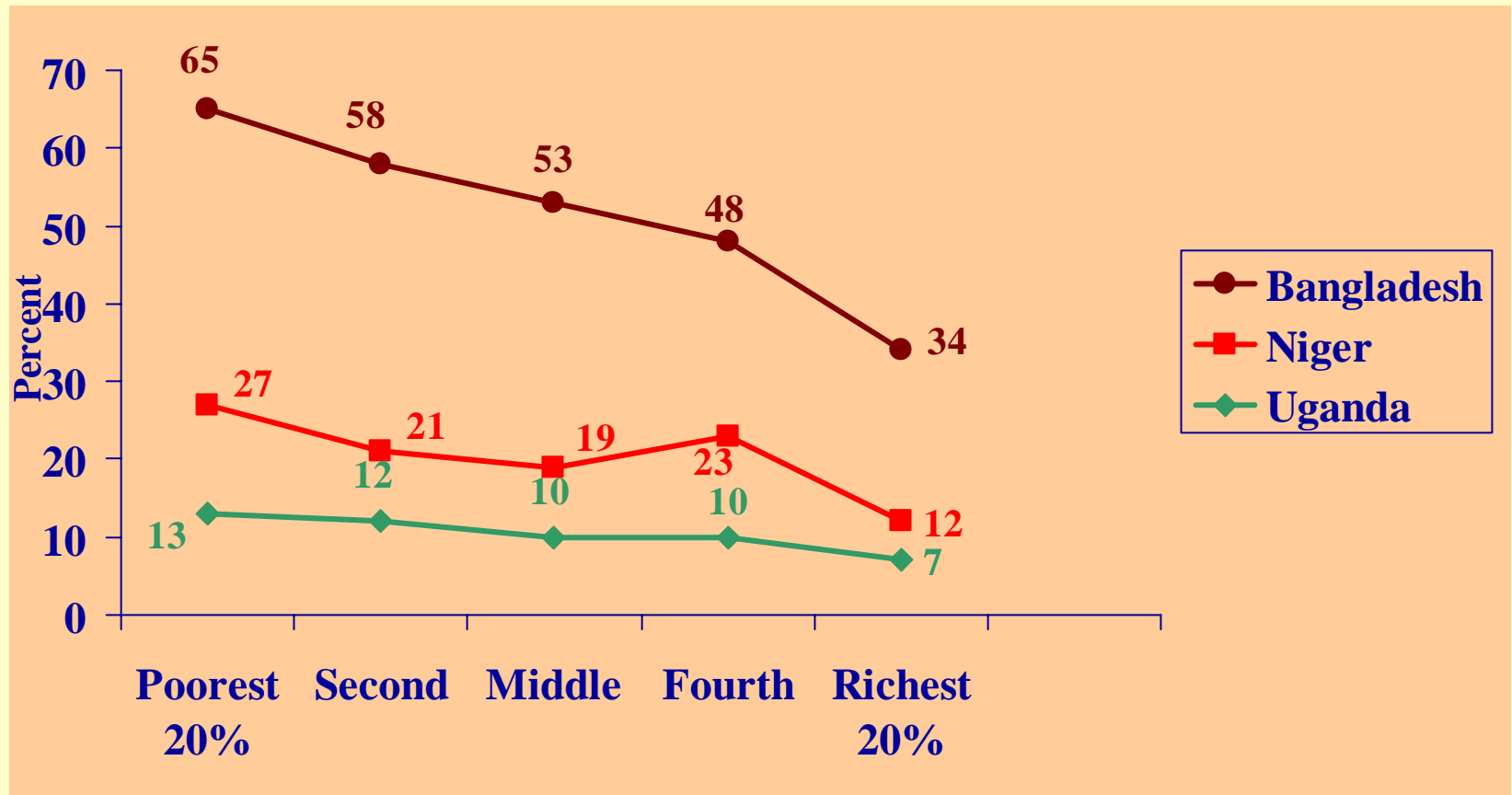
Examples of household behaviors
and risk factors for low birth weight:

Girl fed last and least

Early marriage and pregnancy

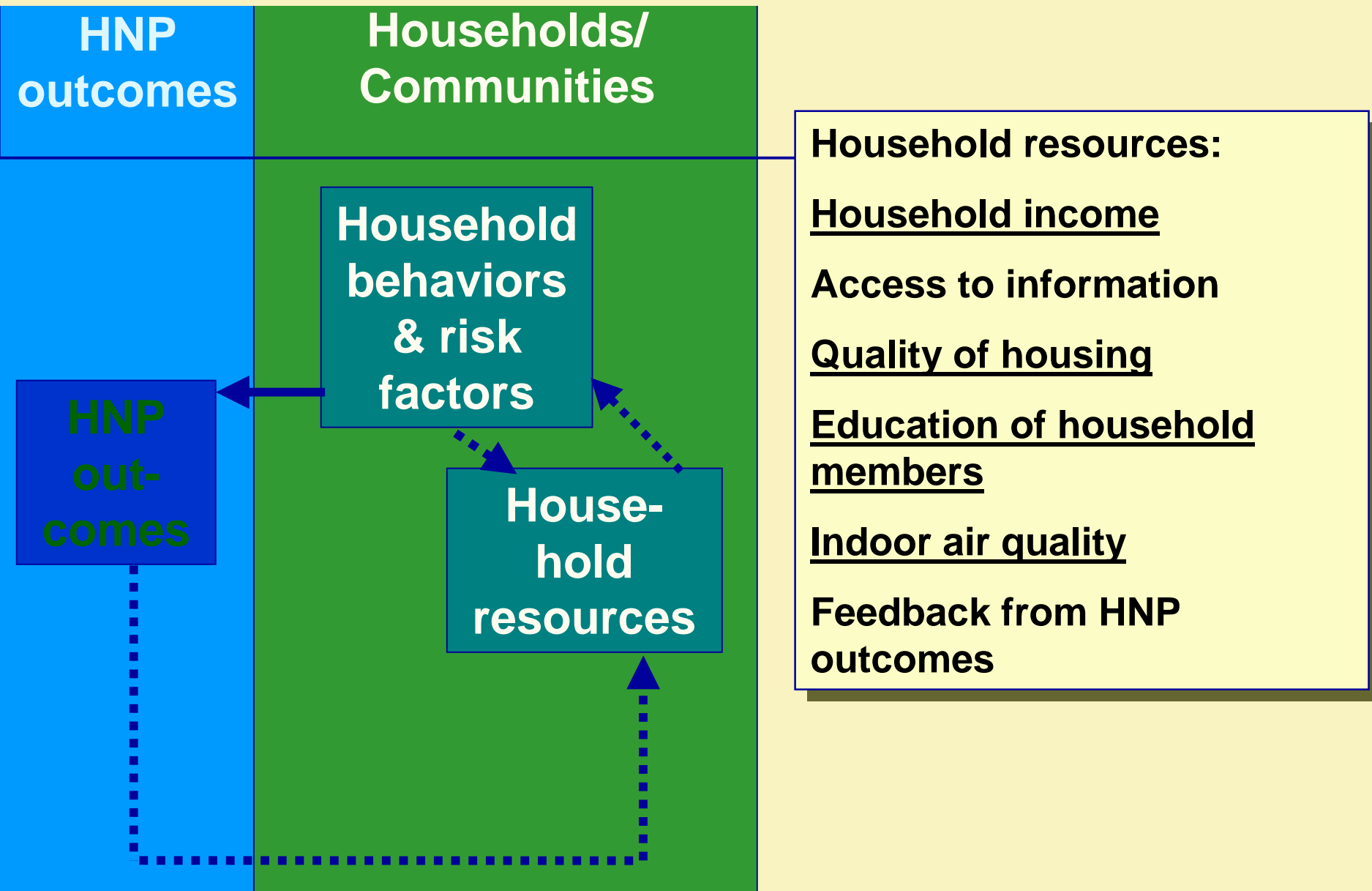
Low demand for prenatal care

Maternal Malnutrition, Low Birth Weights and Poor Households



Percent of mothers with low body mass index (weight/height² ratio below 18.5)

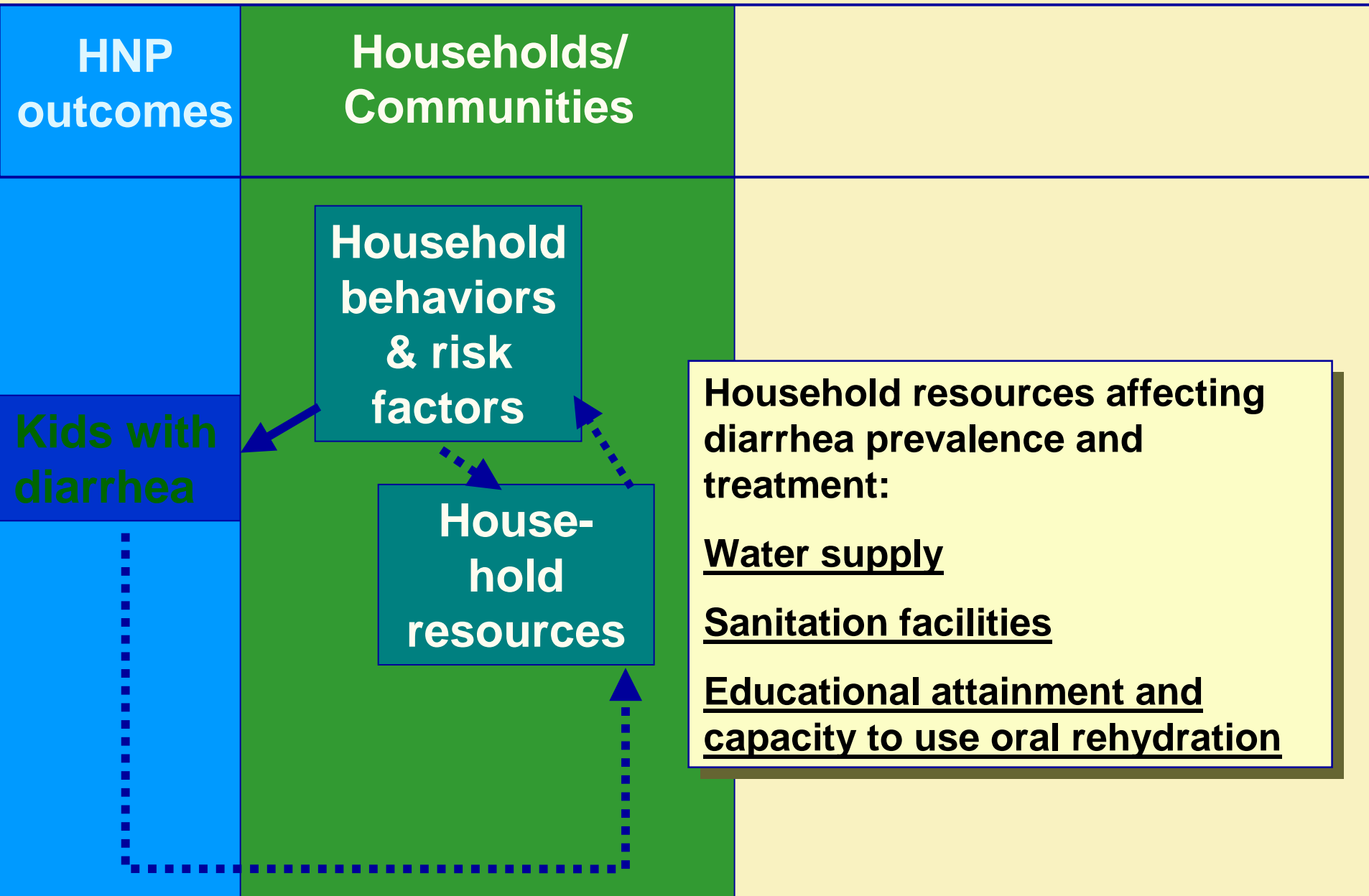
Household Behaviors Affect HNP Outcomes



Health Risks of Poor Indoor Air Quality

- **Exposure to biomass smoke increases risks of acute respiratory infections (ARI).**
 - **Studies in Nepal, The Gambia, and Tanzania have documented the link between ARI for children under 5 and smoky cook-stoves.**
- **India is promoting a shift from traditional biomass to modern fuels in an effort to reduce indoor air pollution and ARIs.**
- **For poor households who can't afford other fuels, improved stoves are an alternative.**

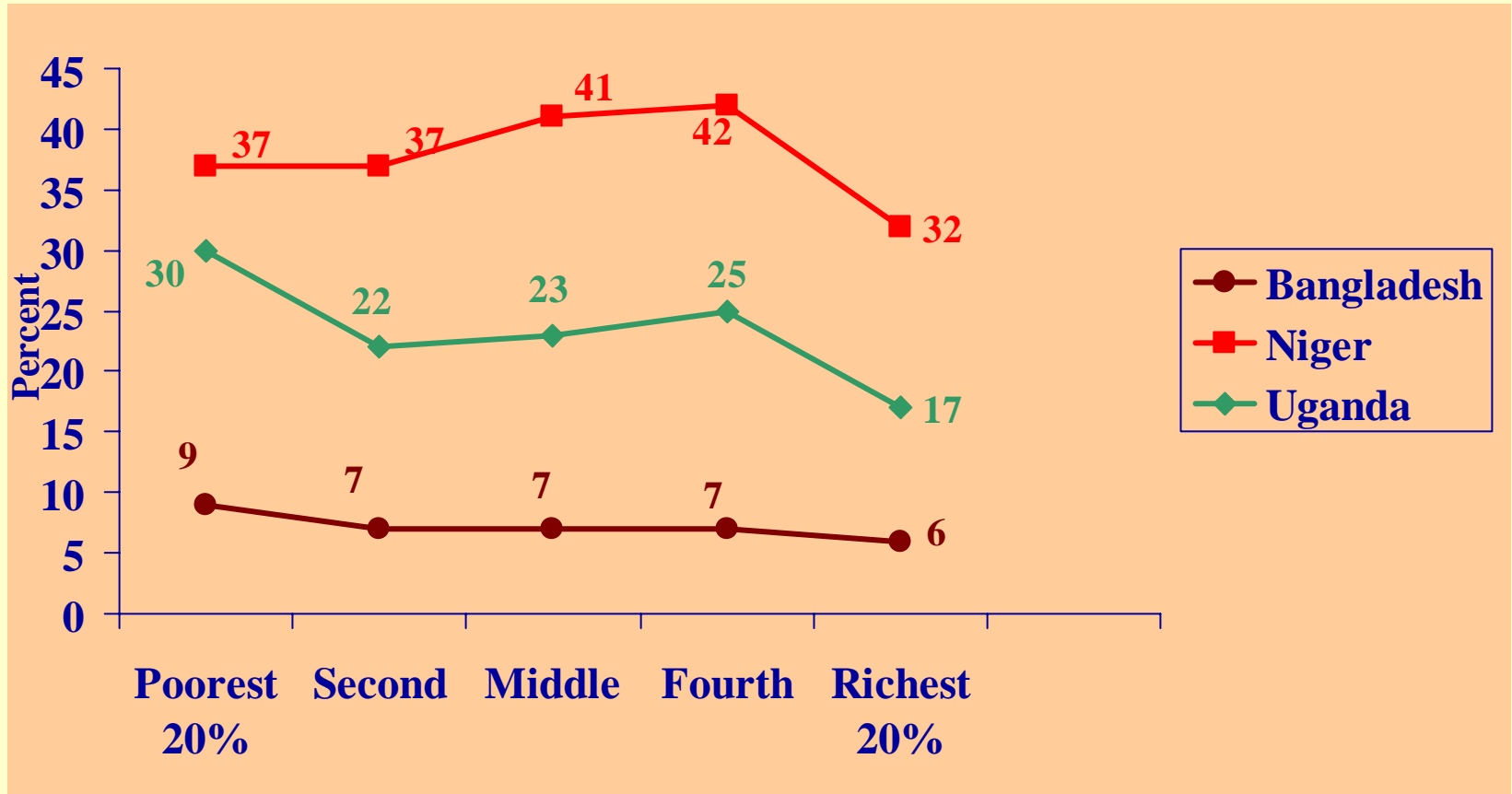
Household Resources and Prevalence of Diarrhea



Good Hygiene Can Reduce Risk of Diarrhea

- **Evidence shows that childhood diarrhea can be reduced by:**
 - **Hand washing**
 - **Use of latrines**
 - **Safe disposal of young children's stools**
- **Collaboration with private sector to produce and distribute soap for hand washing is an effective intervention when combined with behavior change communication**

Rich-Poor Differentials in Diarrhea Prevalence



Percent ill in the two weeks prior to the survey

Water and Sanitation

- **Lack of access to quantities of clean water and poor sanitation are major risk factors for diarrheal diseases that kill many children.**
- **Investments in increasing access to quantities of water and sanitation can reduce these risks.**
- **However the effect is not automatic: research has shown that healthy household behaviors and adequate resources are also needed for children in poor households to benefit.**

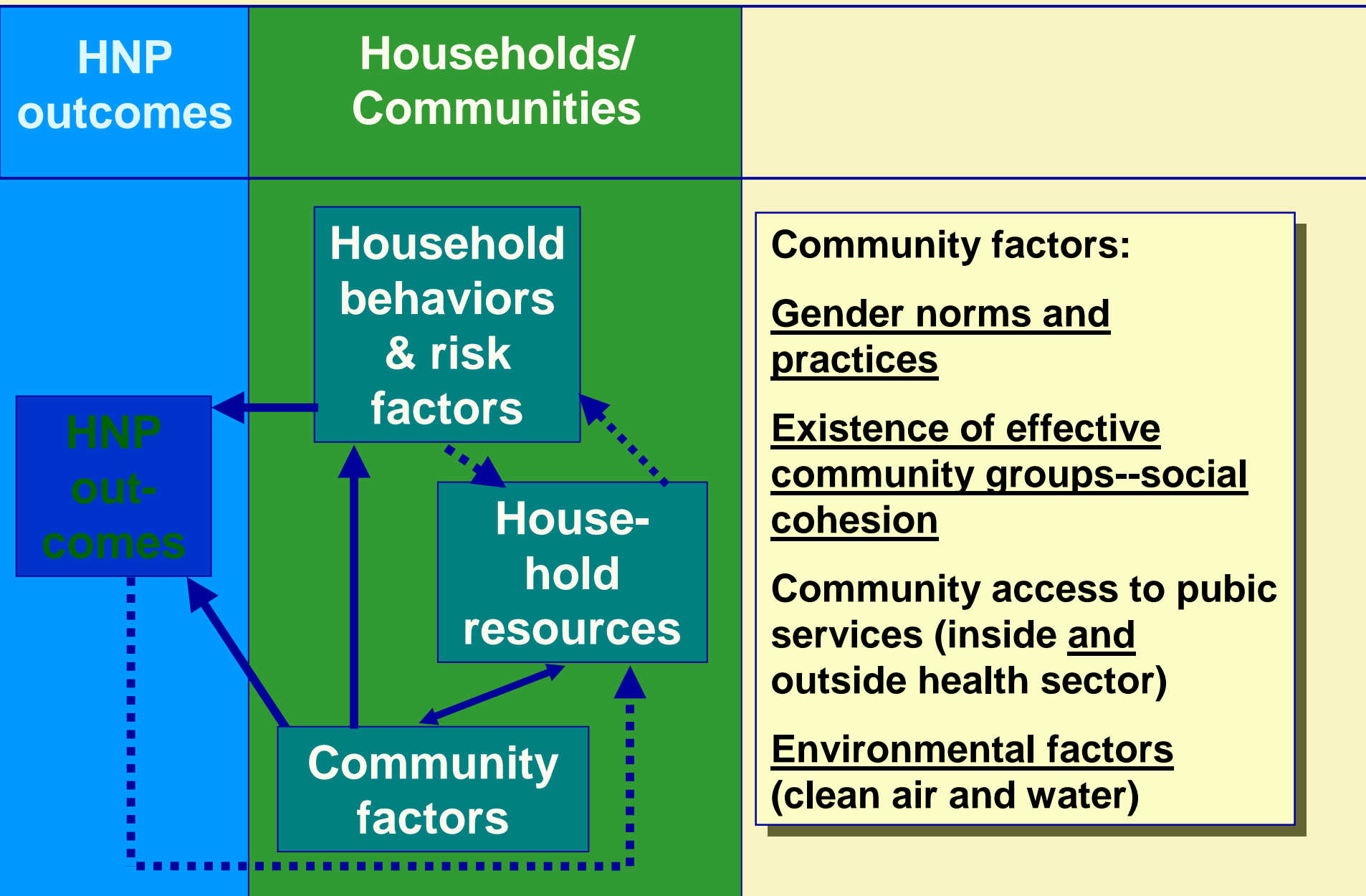
Take-Home Messages

- **Factors inside and outside the health system influence household risk factors and behaviors, resources**
- **For example, health education and general education contribute to adoption of healthier behaviors**
- **Strategies need to take account of these interactions**

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Community Factors Affect HNP Outcomes



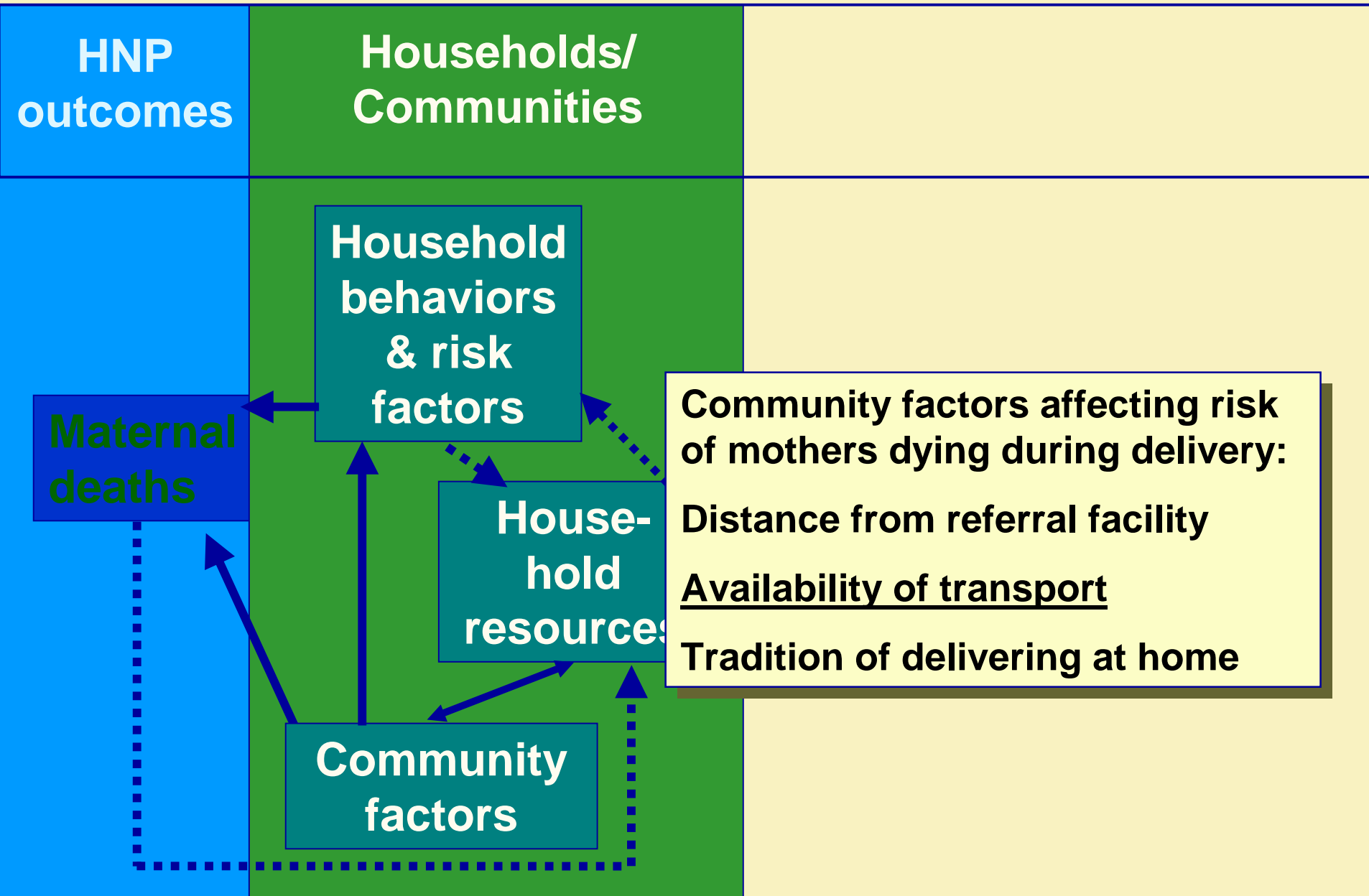
Social Capital and HNP Outcomes

- **Social cohesion a force in Uganda's fight against HIV/AIDS.**
- **Effective community involvement in health management has contributed to success of reforms.**
- **Social capital difficult to measure, but limited evidence shows a positive link to improved HNP outcomes.**

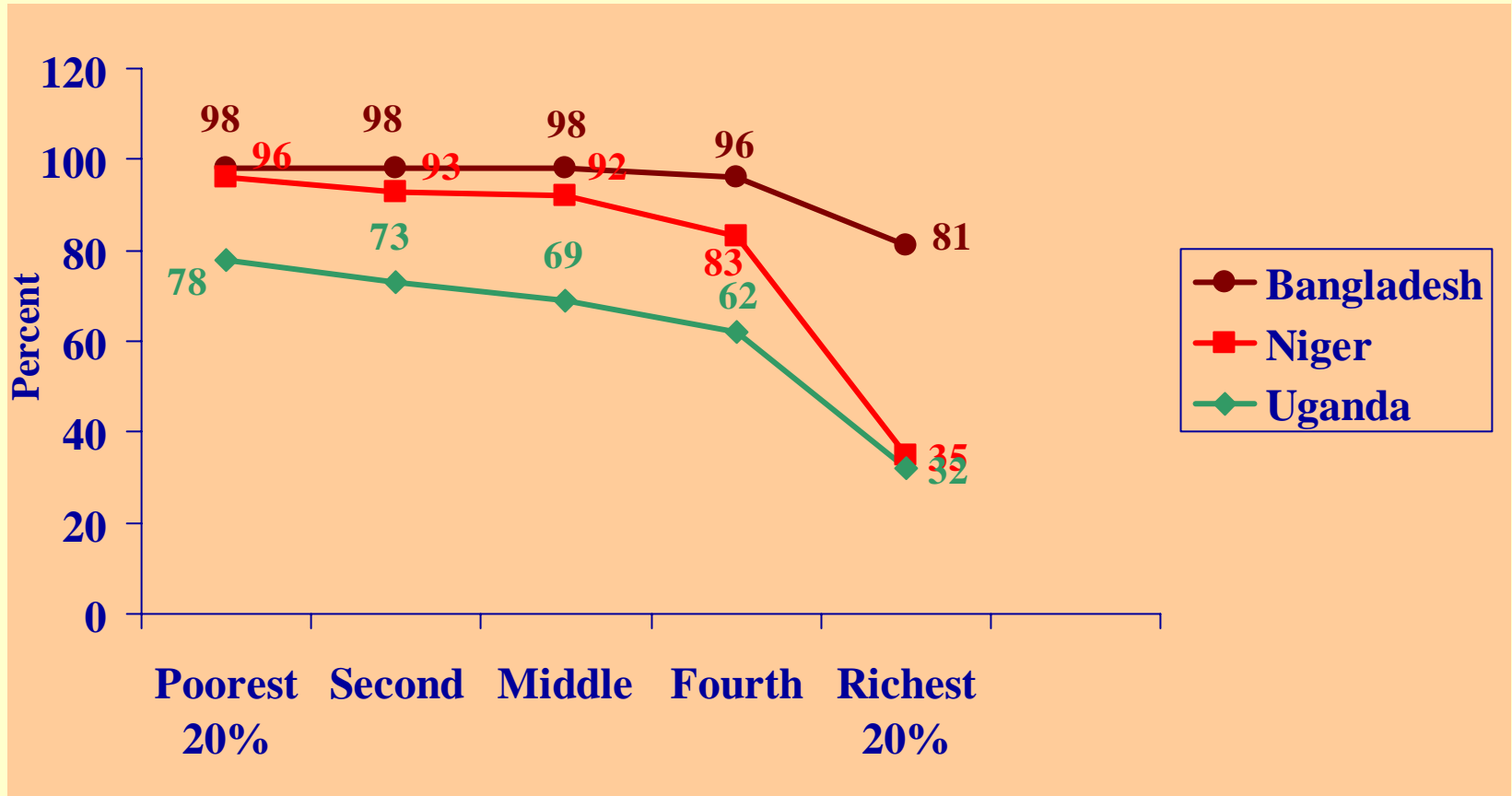
Community and Household Factors Interact with Each Other

- **Research in rural India shows significantly lower incidence and duration of diarrhea for children under 5 in families with piped water.**
- **However, that outcome depends on household income & education; control for these variables reveals that health gains largely by-pass children in poor households.**
- **Infrastructure investments have to be combined with education & income-poverty reduction efforts to achieve desired effects on outcomes.**

Community Factors and Maternal Deaths



Poor Women are More Likely to Deliver Babies at Home



Percent of deliveries at home

Distance/delays **kill mothers**

- **Obstetric emergencies are difficult to predict; when they occur during a home delivery, getting the mother to a hospital is critical.**
- **Distance, poor roads and lack of ambulances or other means of transport delay management of life-threatening complications.**
- **Problems are exacerbated for such difficult-to-anticipate complications as hemorrhage, which is usually fatal beyond 4 hours.**

Summary: How to Address Household & Community Factors

| Level | Risk factors | Diagnostic tools | Possible interventions |
|------------------|---|---|---|
| Household | Income, wealth, education, behaviors, gender bias | Household surveys; various statistical methods | Health finance; social protection; BCC and health education; advocacy for gender equality |
| Community | Physical factors, values & culture, social capital | Community surveys, consultation exercises | Transport & infrastructure; advocacy for changes in attitudes harmful to HNP outcomes; foster social capital |

Take-Home Messages

- **As in the case of households, the forces inside and outside the health system interact**
- **Health-system interventions can take advantage of positive forces, for example strong social cohesion**
- **They can also help mitigate some of the negative forces, e.g. gender bias**

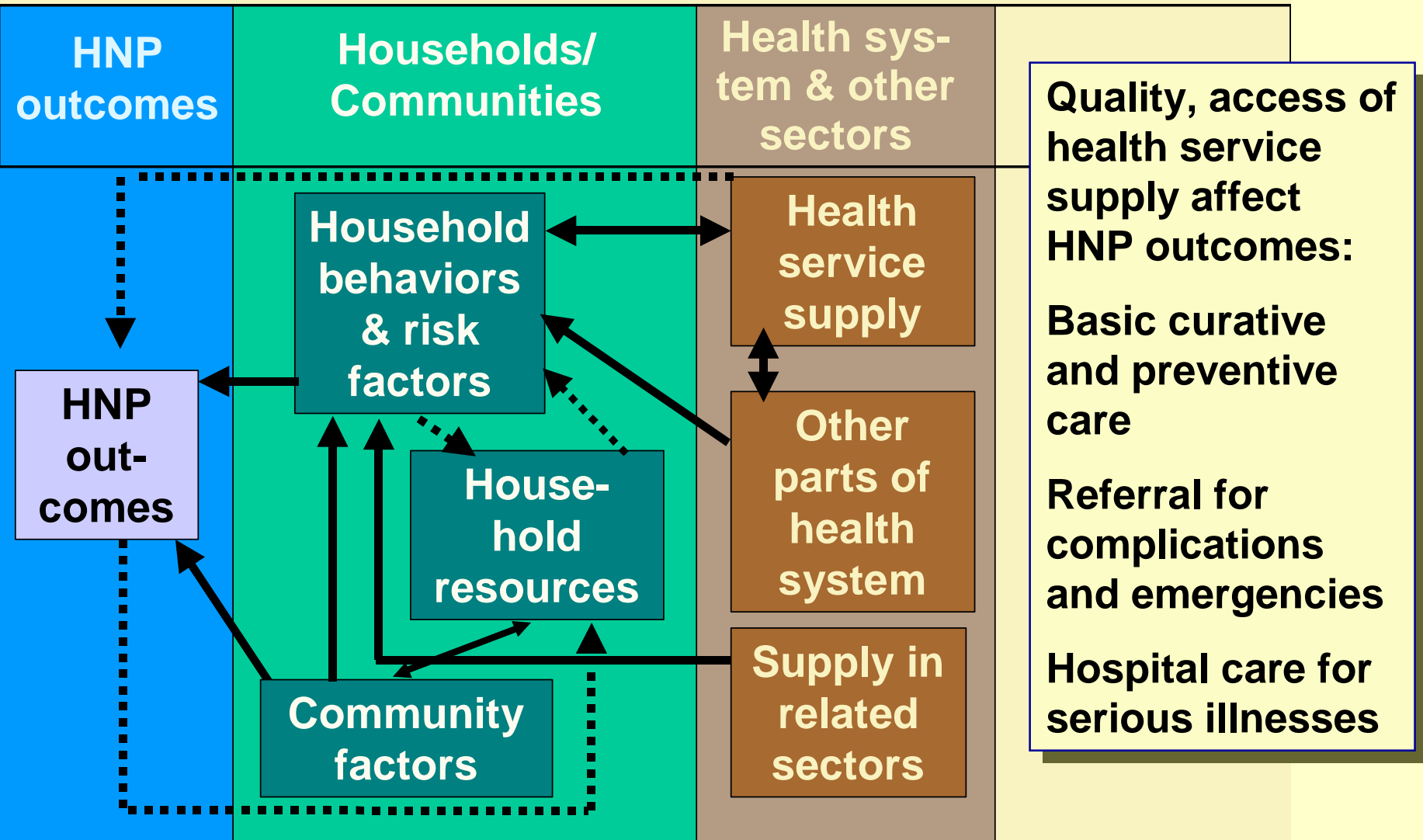
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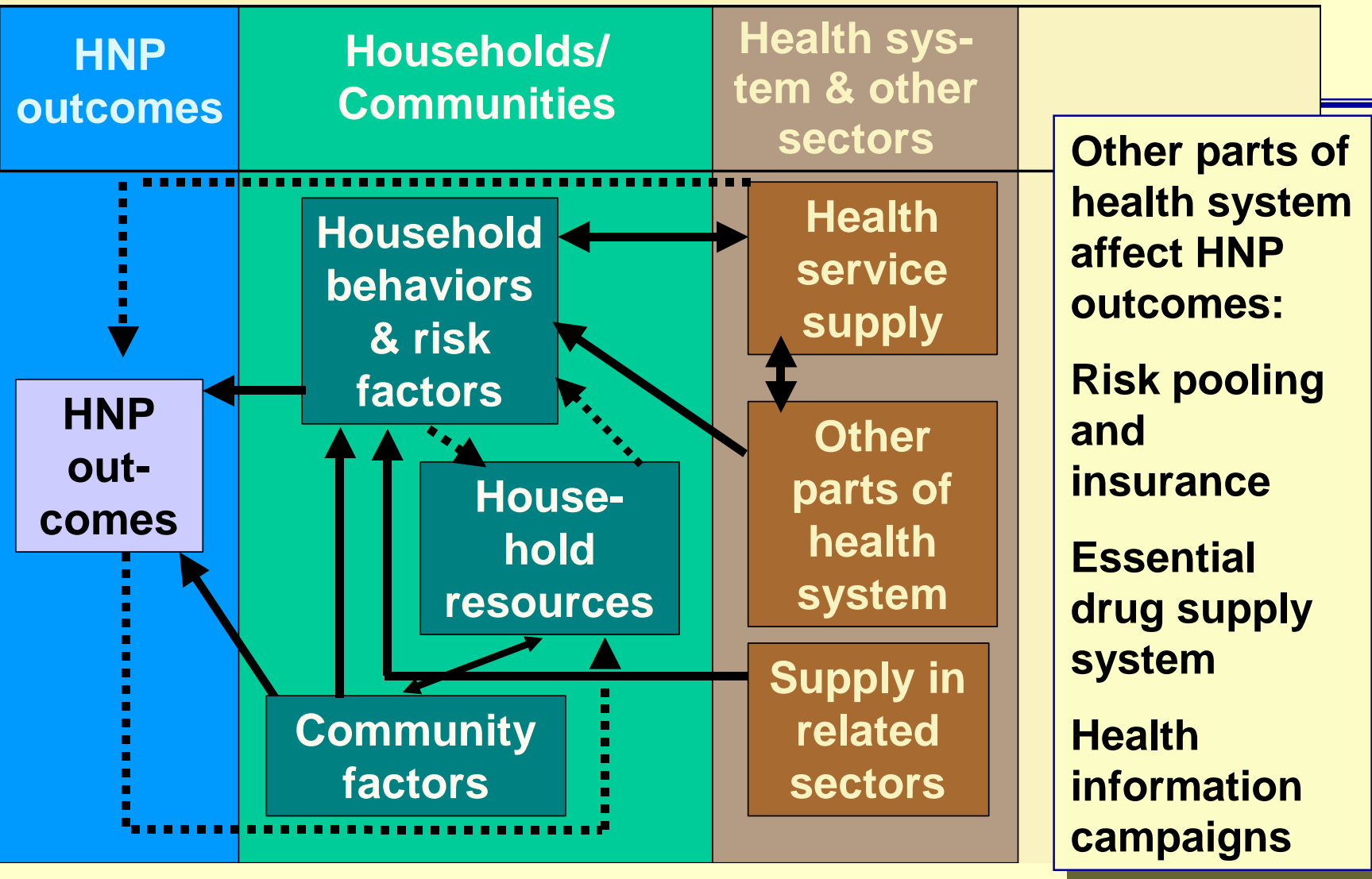
The Framework Again: The Health System and Other Sectors

- Health care supply, including outreach, referrals and curative care
- Other health services, including drug supply and health education
- Supply in other sectors, for example, water/sanitation, transport and communication, social protection

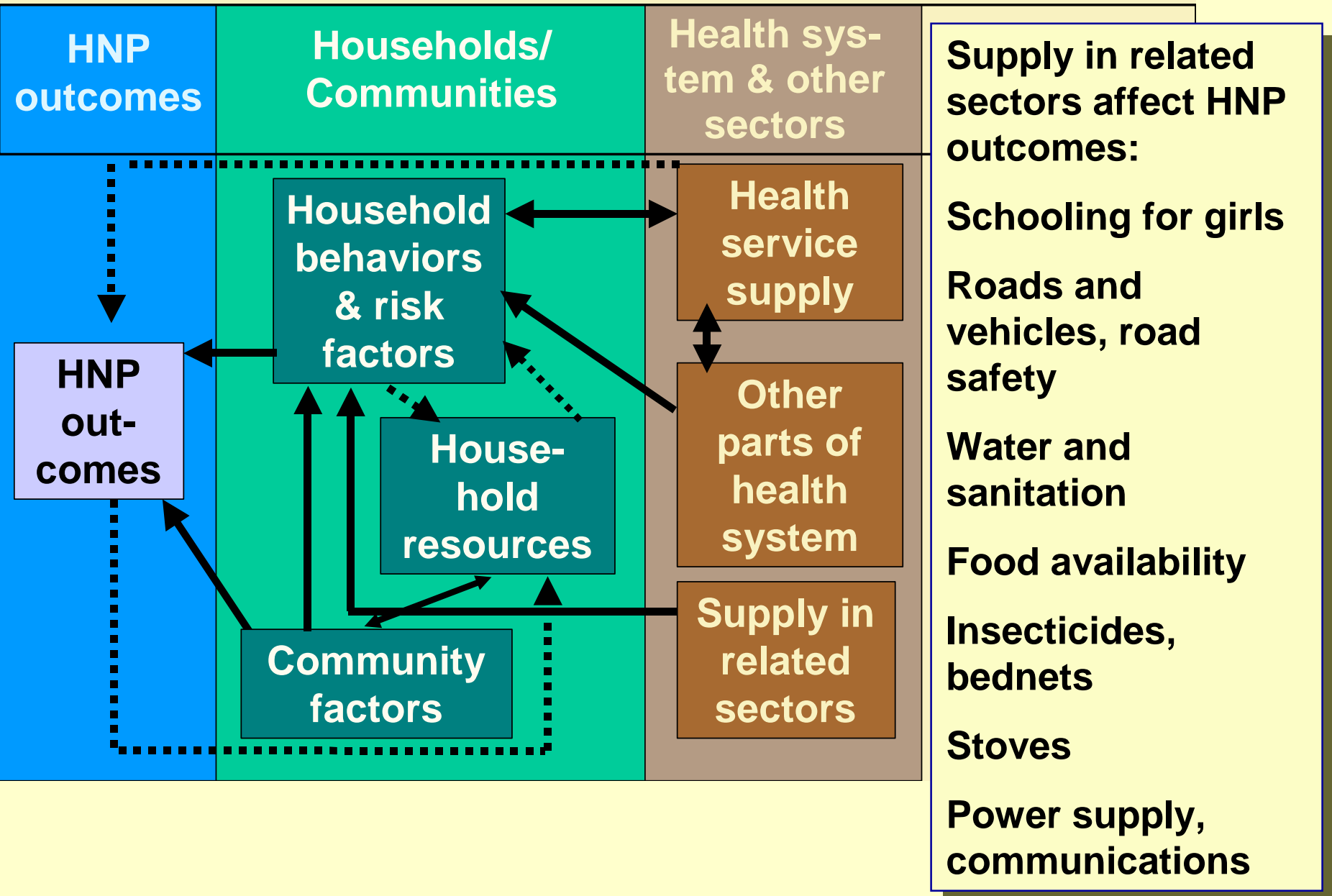
We've Learned:



We've Also Learned:



Now Let's Consider How:

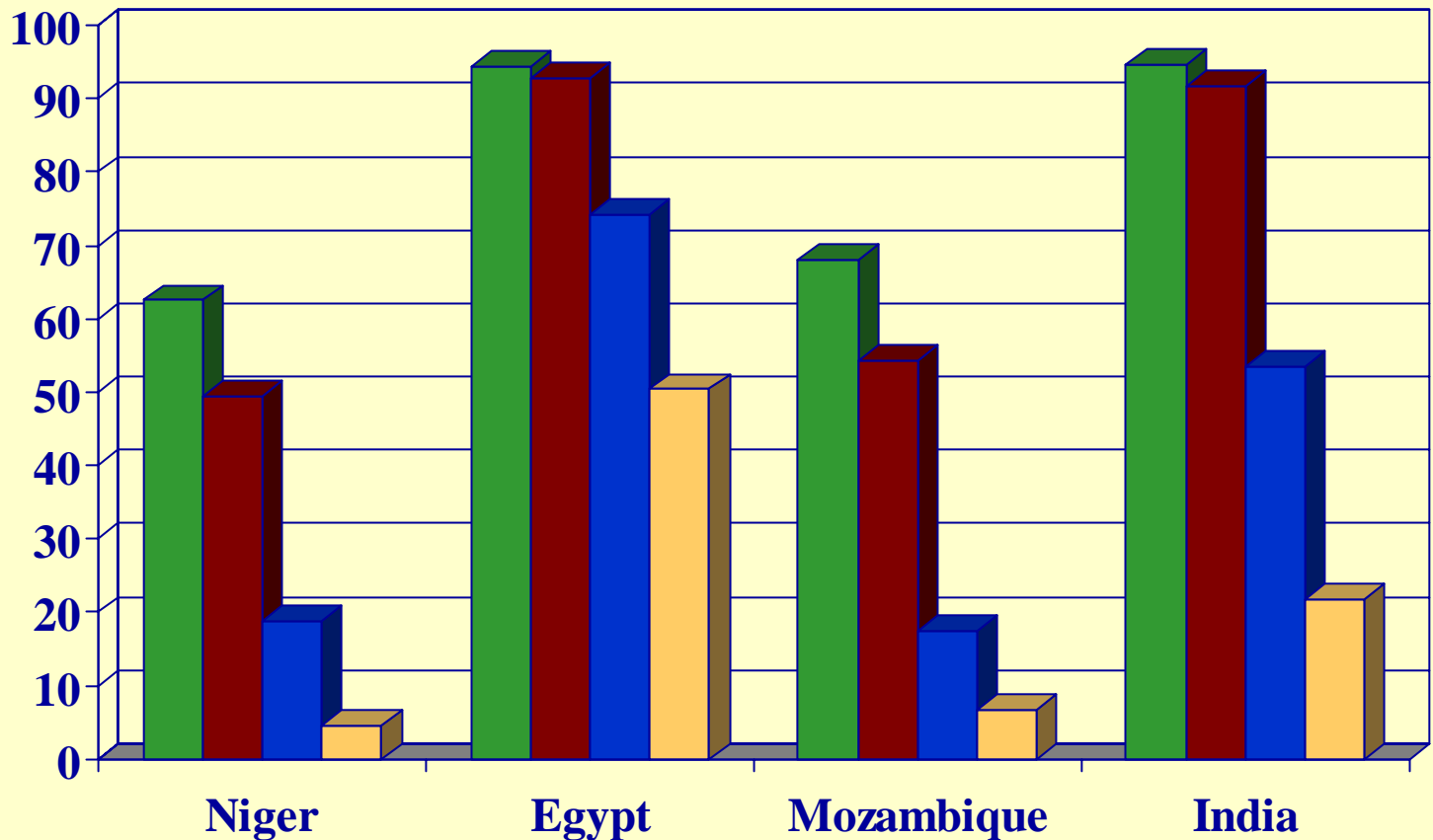


We Know that Educating Girls Can Improve HNP Outcomes

- **Mothers' education positively correlated with better HNP outcomes: lower fertility, better nutrition, higher child survival.**
- **Better educated mothers more likely to practice positive behaviors, avoid health risks.**
- **Education empowers mothers to seek health care for themselves and their children.**

The Gender Gap for Poor Households

Percent completing grade 5



Rich boys

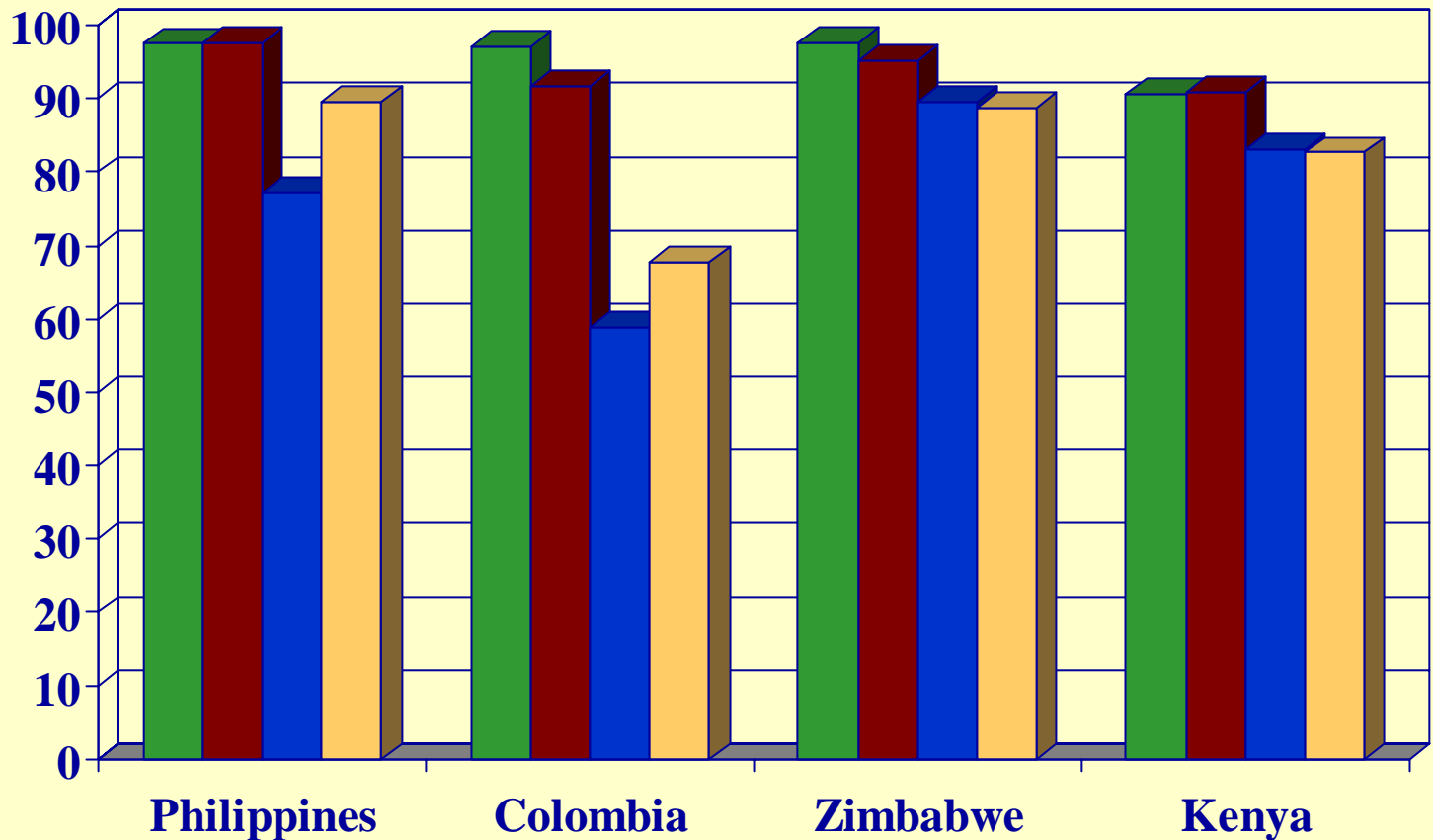
Rich girls

Poor boys

Poor girls

Poor Girls Do Better When Attainment Improves

Percent completing grade 5



Rich boys

Rich girls

Poor boys

Poor girls

Better Roads/Transport Can Reduce Delays that Cause Maternal Deaths

- **In a Tanzania study, 63 percent of women who died after reaching a hospital had traveled 10 kilometers or more for treatment.**
- **A study of maternal deaths in India showed that half of maternal deaths occurred before the woman reached a treatment facility; most had come by bus, rickshaw, bullock cart—only 9 percent by ambulance.**
- **Generally, a high proportion of deaths in hospitals can be traced to arrivals that are too late for effective treatment.**

Better Roads/Transport Reduced Delays but not Many Deaths

- **A ten-year study in Rajasthan, India, showed that better roads and transport helped more women reach referral facilities.**
- **Investments in transport helped, but many women died because there was less improvement at household & facility levels.**
- **More deaths were reported because women were able to come from greater distances.**

Safer Roads and Vehicles Can Also Reduce Many Deaths

- **Every year more than 1.17 million people die in road crashes, 70 percent of them in developing countries; injuries and deaths are a significant and growing part of the global disease burden**
- **A high proportion of accident victims are pedestrians, often women and children fetching water or wood; in poor countries, walking is still the dominant form of transportation; other victims are passengers of over-crowded, unsafe collective vehicles used by poor people**

Take-Home Messages

- **Supply in other sectors, particularly education and infrastructure, clearly impact on health outcomes**
- **These effects interact with forces at other levels (households, health system--e.g. health & nutrition BCC)**
- **A key challenge is to identify the most important synergies and remove obstacles to their effective action**

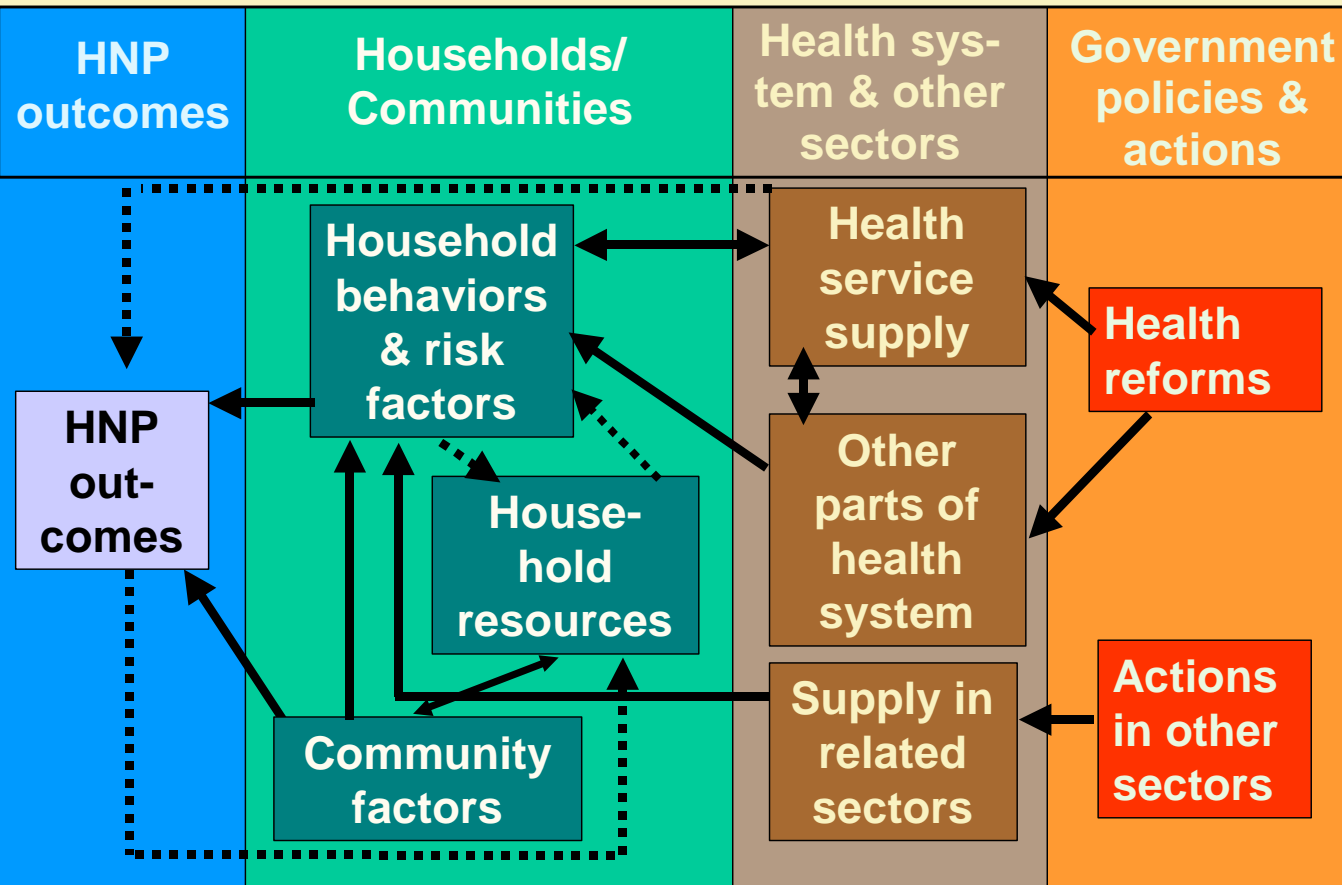
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Pathways to HNP Outcomes: Policies in Health and Other Sectors

- **Health reforms, including new financing and provision schemes**
- **Actions in other sectors, including**
 - **Reforms leading to private provision of other public services (transport, power), and**
 - **Economic policies, for example tariffs on drugs, health goods**

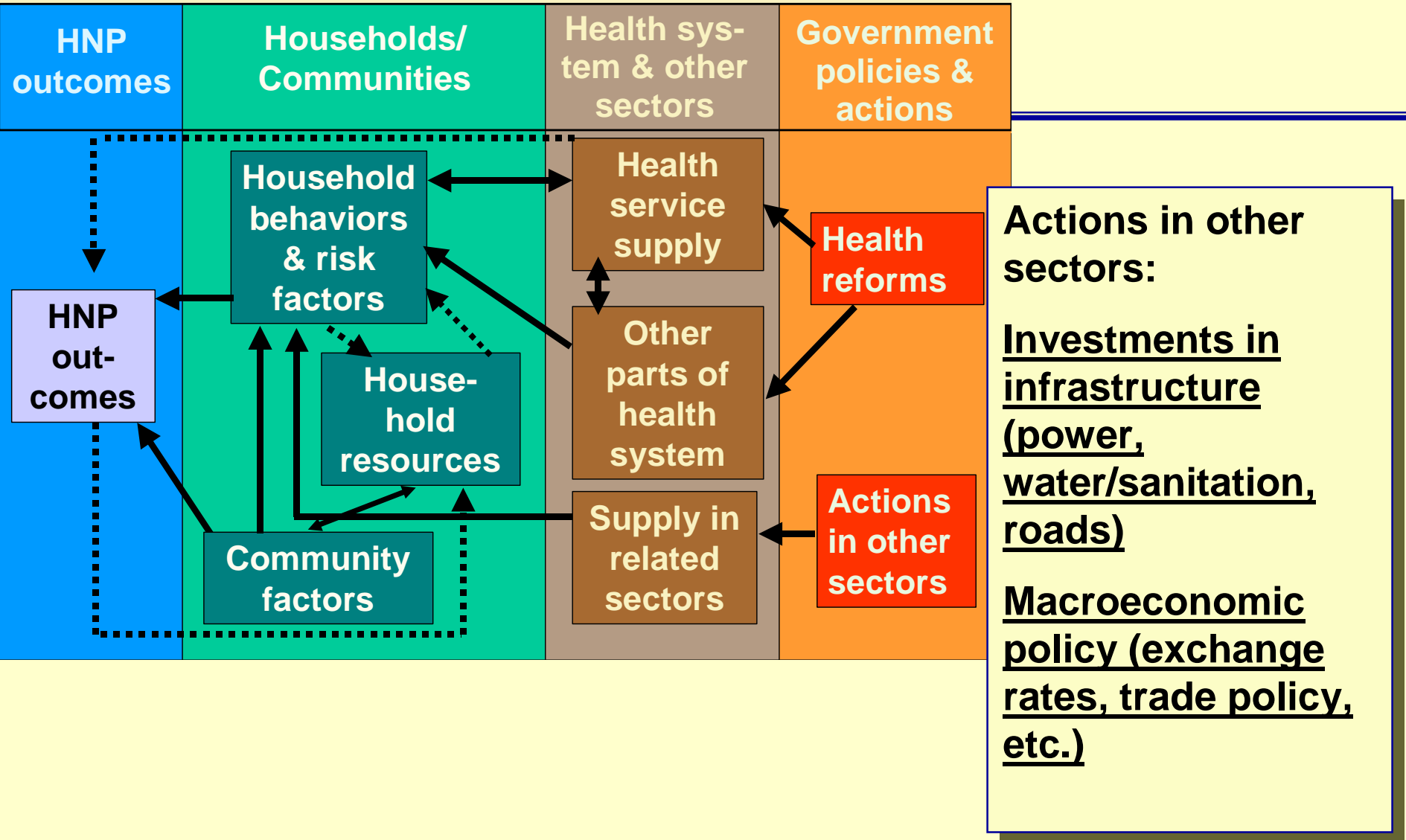
We've Learned that Health Policy Matters



Health reforms:

- New approaches to financing, payments and incentives
- Separating provision from financing
- Laws and regulations

So Does Policy Outside the Health Sector



Consider the Unintended Health Consequences of Policies

- **User fees a health system issue, but fee structure may have other goals**
- **In Vietnam, fees for a normal delivery are lower for poor women, but the fee structure causes poor women to pay more (see table).**
- **Vietnam's population policy: exempt first two births from fees.**
- **More poor women have three or more children than rich women, so average cost of delivery is higher for poor women.**

Vietnam Example: Fees Charged for Normal Delivery by Income Quintile, 1996

| | Income quintile | | | | | Vietnam |
|---|-----------------|---------------|---------------|---------------|---------------|---------------|
| | Poorest | 2 | 3 | 4 | Richest | |
| Fee charged for normal obstetric delivery (third child) at nearest district hospital (VND) | 15,831 | 18,318 | 17,977 | 20,038 | 27,796 | 20,335 |
| Average fee charged for normal obstetric delivery at nearest district hospital (VND) | 9,551 | 10,148 | 9,768 | 7,894 | 8,082 | 9,204 |
| Fee charged for normal obstetric delivery (third child) at nearest commune health center (VND) | 11,711 | 12,537 | 14,387 | 13,489 | 16,816 | 13,918 |
| Average fee charged for normal obstetric delivery at nearest commune health center (VND) | 7,581 | 5,685 | 8,085 | 5,009 | 4,685 | 6,314 |

Fee averaged over subsample of women who delivered within the past 5 years and with the fee equal to zero for all women with fewer than two children at the time of their birth.

Vietnam Case: Issues for Discussion

- **Vietnam's fee structure has a dual purpose: to recover costs and to create a negative incentive for high birth rates.**
- **Higher average costs for poor women may discourage delivery at a facility with a skilled attendant and increase risk of maternal mortality.**
- **Are there better ways for Vietnam to promote lower birth rates?**

How Policies Can Affect Efforts to Reduce Health Risks for the Poor

- **Tariffs and taxes on drugs and health-sector goods can push prices beyond the reach of the poor or limit the providers' capacity to procure adequate supplies of commodities.**
- **Public sector investments in infrastructure (roads and communication networks) may reduce the delays in managing emergencies that threaten poor women's lives.**

Reduced Taxes/Tariffs on Bednets Help the Poor

- **Insecticide-treated bednets (ITNs) are a proven way to prevent malaria, a major killer of children and pregnant women.**
- **Taxes & tariffs on ITNs/ITN materials (netting and insecticides) have kept ITN prices beyond the reach of the poor.**
- **Reducing taxes/tariffs has cut ITN prices by 10-20 percent.**

Social Funds Can Contribute to Better HNP Outcomes for the Poor

- **by increasing income through credit and employment schemes,**
- **by mobilizing community support for behavior change, and**
- **through community-based investments in water, sanitation and health infrastructure.**

Example: Social Funds & the Multicountry AIDS Program (MAP)

- **Direct funding for community-based AIDS activities is a key feature of MAP**
- **Poverty action funds and social funds channel debt-relief funds to communities**
- **Pilots in Uganda and Malawi show the fund model can be monitored and provide accountability**

Summary: How to Address Other Sectors and Government Actions

| Level | Risk factors | Diagnostic tools | Possible interventions |
|----------------------|--|--|---|
| Other sectors | Failure to see health impact of investments in education and infrastructure | Household surveys; various statistical methods | Multi-sector strategies, invest HIPC funds in education, water and sanitation, rural roads |
| Public policy | Unintended effects on the poor, anti-poor bias | Expenditure reviews, benefit incidence analysis | Target policy discussion on fixing anti-poor taxes, tariffs, spending patterns |

Source: PRSP Sourcebook Chapter on Health, Nutrition and Population

Take-Home Questions for Work on Factors Beyond Care

- **What are the challenges in working across sectoral boundaries?**
- **At what level (national, community) is cross-sectoral work feasible, effective?**
- **What roles can NGOs play?**
- **How can HIPC and PRSC resources be mobilized for this work?**

***Discuss:* how are these assessed, who should be involved, who decides?**

Further Discussion

- **Which cross-sectoral linkages are most important for health outcomes where you work?**
- **Can you suggest examples to illustrate the framework in that country?**
- **Can you provide examples of cross-sectoral collaboration in projects supported by the WB or others?**