Research on **F**ood **A**ssistance for **N**utritional **I**mpact

Stakeholder meeting Islamabad

April 2nd 2015

REFANI

Purpose

- To share the REFANI research study
- To exchange perspectives and gather valuable insights ahead of data collection

Outline of meeting

1. Introduction to REFANI (general)
   a) Literature review
   b) Evidence gaps
   c) Theory of Change
2. Overview of the Pakistan study protocol
3. Overview of Cost-effective analysis (CEA)
4. Questions & Discussion

Introduction to REFANI

- Funded by ukaid / DFID
- 2014-2017
- Consortium partners:
  - ACF International (lead & operational partner),
  - Concern Worldwide (operational partner),
  - Emergency Nutrition Network (research partner)
  - University College of London (research partner)
- 6-month inception / 2.5-year implementation phase
- Implementation started September 2014

Department for International Development

ACTION AGAINST HUNGER
ACF INTERNATIONAL

CONCERN worldwide

ENN

UCL
Institute for Global Health

Aim

To ensure more effective humanitarian interventions by strengthening the evidence base on the impact of cash and voucher-based food assistance to prevent undernutrition in emergencies

- ***Nutritional effectiveness***
- ***Cost-effectiveness***

Overarching Research Question

Can cash transfer programmes (CTPs) protect nutrition status in a range of ‘crisis’ contexts?

Pakistan

Niger

Somalia (tbc)

Why Cash/voucher tranfers?

There is a growing trend towards developing complementary or alternative approaches (incl cash-based transfers) for **preventing** acute malnutrition

But

- ***Insufficient empirical evidence*** to demonstrate that cash is an appropriate substitute for food-based interventions to prevent acute malnutrition in children or mothers, including PLW
- Nor about the ***circumstances*** under which CT interventions are likely to be effective

Evidence of impact of CTs on nutrition

- Most from development contexts (esp LA) & on CCTs (stunting)
- Mixed results
  - Differences in programme factors, e.g. additional complementary interventions
  - Different CT design features, e.g. amounts, frequency
  - Differences in evaluation indicators, e.g. women's empowerment
  - Attribution complexity on the other sources of household income, e.g. remittances have not been adequately accounted for

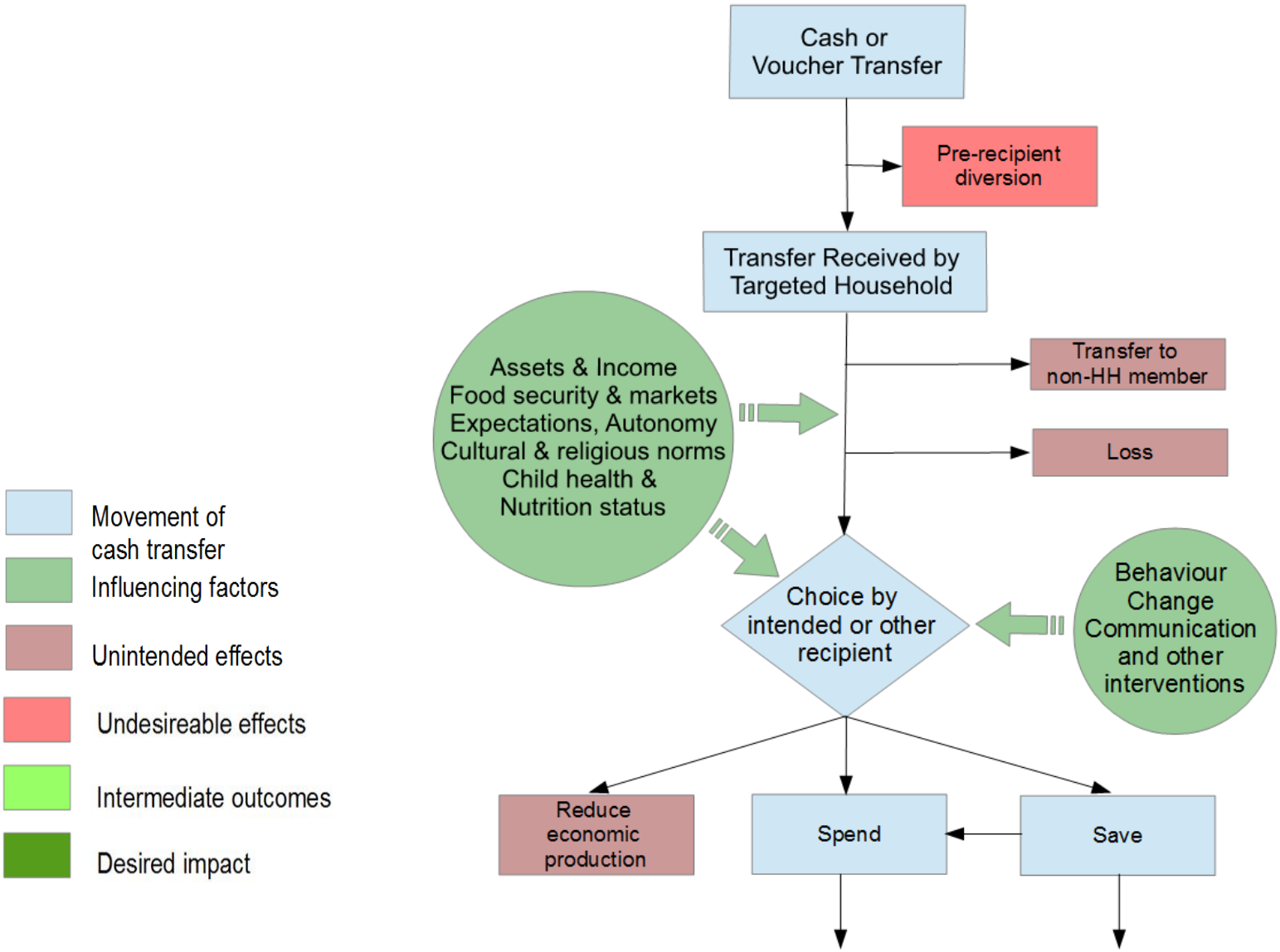
Literature review

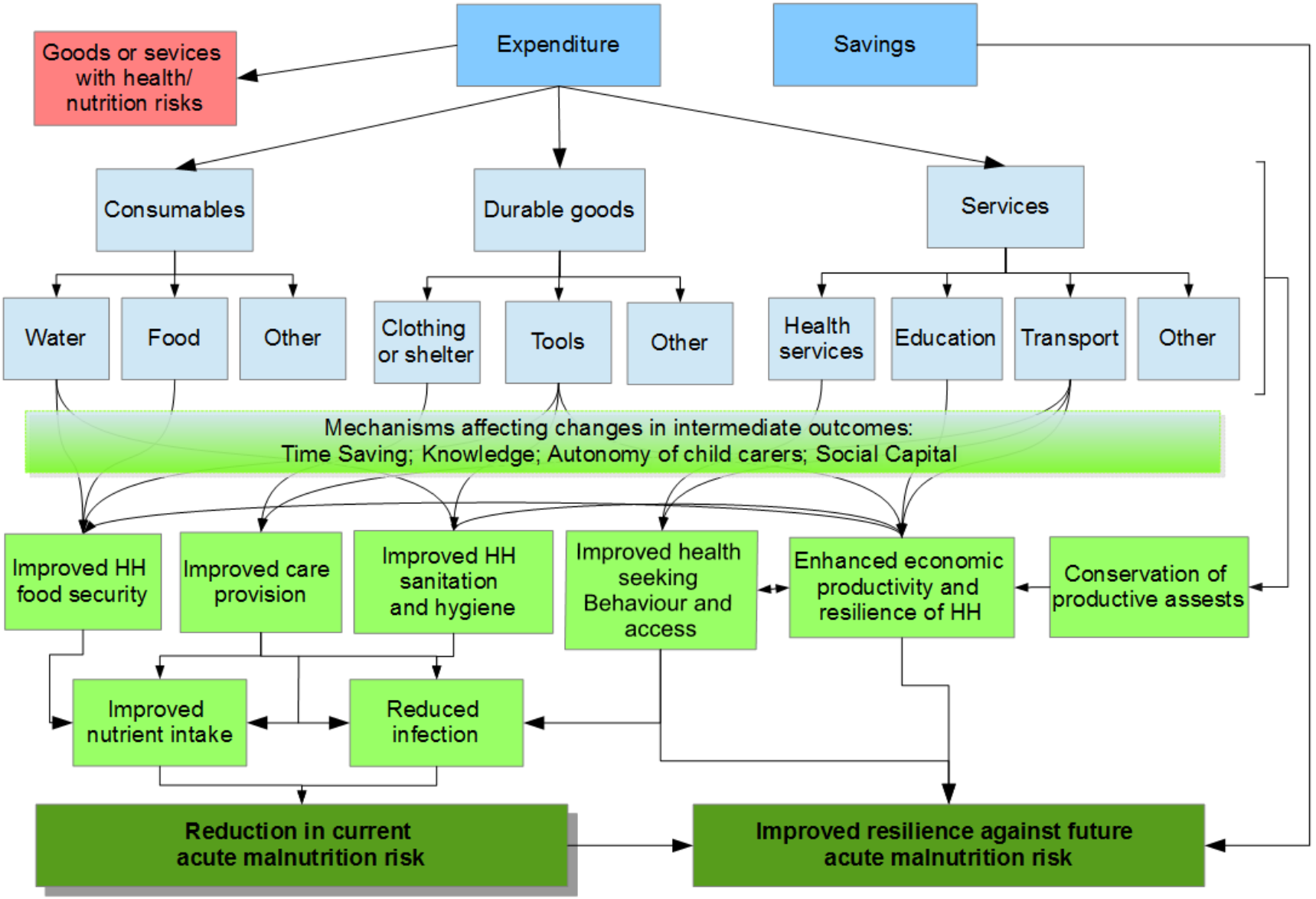
http://www.actionagainsthunger.org/refani

Gaps in evidence

- Complementarity
- Design
  - Cash vs Vouchers
  - Amount
  - Timing and duration
  - Conditionality
  - Targeting
  - Communication
  - Sustainability
- Behaviours, processes, empowerment, care practices and nutrition impact pathways
- Cost effectiveness

Theory of Change




Goods or sevices with health/ nutrition risks
Expenditure
Savings
Consumables
Durable goods
Services
Water
Food
Other
Clothing or shelter
Tools
Other
Health services
Education
Transport
Other
Mechanisms affecting changes in intermediate outcomes:
Time Saving; Knowledge; Autonomy of child carers; Social Capital
Improved HH food security
Improved care provision
Improved HH sanitation and hygiene
Improved health seeking Behaviour and access
Enhanced economic productivity and resilience of HH
Conservation of productive assests
Improved nutrient intake
Reduced infection
Reduction in current acute malnutrition risk
Improved resilience against future acute malnutrition risk

Cash transfers - research (Niger)

- **MSF/WFP** – RCT: 7 arm study with nutrition products and cash
- **Tufts/CONCERN** – RCT: modalities of transfer (m-transfers vs manual transfers)
- **ENN/SCF** - prospective cohort to investigate underlying mechanisms by which CTPs might work in relation to causal pathways for undernutrition
- **IFPRI/WFP** – RCT: cash vs food transfers
- **CONCERN/UCL (REFANI)** – RCT: early cash; duration [on-going]

Other countries

- **IFPRI /WFP**– RCT: cash vs food transfers (Ecuador, Niger, Timor-Leste, Uganda and Yemen)
- **IFPRI/WFP** – RCT: cash, food, cash + food, food + nutrition training, cash +nutrition training (Bangladesh)
- **Tufts/CONCERN –** RCT: cash vs. vouchers (DRC)
- **ACF/CDC/University of Ghent/AgroParis** -MAM'Out project – RCT: Cash vs control (Burkina Faso) – [on-going]
- **ACF/ENN (REFANI)** – RCT: cash vs. vouchers; cash vs. double cash (Pakistan) – [on-going]

Summary of this research

- Cash and food transfers have greater nutrition impact when complemented (nutrition products and BCC)
- Cash + CMAM better together
- Cash and vouchers more cost efficient than food; but cash more efficient than vouchers
- Cash and vouchers had greater impact on dietary diversity than food; but vouchers were better than cash
- Cash more likely to impact through a health pathway where access to quality health services is guaranteed
- Cash given earlier may have an impact on a child's nutrition status prior to the lean season
- Mobile transfers (e money) were more cost-efficient than manual transfers (and mobile phones); and had additional impacts on food security

A cluster RCT to measure the effectiveness and cost-effectiveness of an ACF cash transfer programme aimed at reducing the risk of undernutrition in children <5 years and mothers, Sindh Province, Pakistan

ISRCTN10761532

Bridget Fenn
Principal Investigator
Consultant for ENN
2nd April 2015

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Department for International Development

ENN

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Research areas identified:

- Cash versus vouchers
- Cash versus double cash
- Complementarity (cash plus)
- Medium term effects
- Processes
- Qualitative (to help unpac k ToC)
- Cost effectiveness

Design

- Four-arm cluster randomised controlled trial
- Integral economic evaluation and mixed-methods process evaluation
- Longitudinal cluster Randomised Controlled Trial (cRCT)
  - Unit of randomisation = villages

Arms

- Unconditional CT: PRS 1500 per month + ‘standard’ ACF WINS

- Food vouchers – commodity vouchers – equivalent to PRS 1500 + ‘standard’ ACF WINS

- Unconditional CT: PRS 3000 per month + ‘standard’ ACF WINS

COMPARISON GROUP

- ‘Standard’ ACF WINS

REFANI study aims

1. Compare the nutrition status of children receiving a seasonal unconditional cash transfer or a food voucher with those receiving standard care only after 6 months and at 1 year
2. Assess the costs and cost-effectiveness of the different interventions
3. Understand the factors that determine the ways in which households use the different transfers
4. Explore the role of the different processes involved in the study outcomes and how they interact with the context

Primary research question

How effective are cash or vouchers at reducing the risk of wasting during the lean season and up to 1 year in children < 5 years from poor and very poor households with access to an integrated nutrition/FSL/BCC programme aimed at reducing the risk of undernutrition in children aged < 5 years?

Secondary research questions

- **Prevalence of anaemia** at 6 months and at 1 year on children < 5 years + their mothers
- **Incidence of morbidity** in children < 5 years
- **Incidence of ponderal and lateral growth every month** in children < 5 years
- **Prevalence of recovery and prevention of re-admission to OTP**
- **Cost-effectiveness**

Secondary research questions (qualitative focus)

- What factors **determine the ways in which households use** the different transfers?
- What are the **barriers and drivers in the causal framework** between CTPs and nutrition status?
- What are the **roles of the different processes** involved in the study outcomes and how do they **interact with the context?**

Sample size

Fixed sample size of 632 HHs per arm; approx 5562 children in total (2528 HHs)

Calculated power based on the prevalence of GAM in children 6-48 months from poor and very poor households:

- GAM prevalence = 16%
- powered to measure a 7% difference in prevalence between arms over 6 months
- Type I error 0.05; power 80%; ICC 0.0722
- = **26** clusters (villages) ***per arm***

Village enrolment

Villages eligible for inclusion in the study will be:

- Same/similar livelihood zone
- In receipt of the same WINS interventions (including planned interventions)
- Low security risk
- Low HH migration risk

Household enrolment

Inclusion criteria

- Households identified as poor and very poor (according to wealth ranking) and with a child/ren aged 6-48 months
- Households with children born in the area during the study period

Exclusion criteria

- Poor and very poor households with no eligible child
- Households with children who moved to the area within 6 months before the intervention (and may not be typical of households in the village e.g. those migrating due to drought in their area)
- Households who do not give consent
- Children who are chronically ill (with prescribed medical treatment)

Timeline

2015				2016
			Lean period / ACF Intervention	
Jan-March	**April**	**May-June**	**June – December**	**April - May**
Planning Questionnaire design Formative research Ethics approval/ IRB/ Trial number	Wealth ranking exercise Piloting HH enrolment Staff training Randomisation	 Baseline data collection	Monthly data collection CEA Process evaluation Qualitative	1 Year data collection

Primary outcome

- **Wasting:** WHZ <-2 Z-score &/or bilateral pitting oedema in children < 5 years

Secondary outcomes

Children

- % Severe wasting
- Mean WHZ
- % low MUAC
- % Stunting (moderate & severe)
- % Morbidity

Women & children

- % Anaemia
- Mean haemoglobin Hb g/dl

Women

- BMI
- Heights of adult women

Other indicators

- Causal: health seeking (treatment, access and availability), mortality, dietary diversity, IYCF, hygiene, WASH, women's autonomy, HH hunger
- Contextual – community level indicators
  - Supply-side (health care, food, water) availability and accessibility (including cost and distance) and quality
  - Local disease environment
  - Social/political environment
  - Other activities that may influence the outcome (e.g. NGO/INGO, GoP)
  - The indirect impact on the traders and market development (including price fluctuations)

Process evaluation (mixed-methods)

- Intervention implementation
  - Fidelity
  - Response
  - Delivery & reach (incl use & uptake)
  - Unintended consequences, either harmful or beneficial
- Theory
- Context
  - How processes interact with the context

Qualitative study – under construction

- Research question: “How ‘WOMAN’ mediates the impact of cash and vouchers on child nutrition status”

Methods using e.g.

- FDG, Individual case narratives, Diaries (FOs)
- Qualitative Research Tracer Study (QRTS)
- Photo diaries

Cost-effectiveness analysis