

**Enhancing WFP's Capacity and Experience to Design, Implement,
Monitor, and Evaluate Vouchers and Cash Transfer Programmes:
Study Summary**

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1. Introduction

1. With support from the Government of Spain, and in partnership with the World Food Programme (WFP), researchers from the International Food Policy Research Institute (IFPRI) evaluated four pilot projects to assess the comparative performance of cash transfers, food payments, and vouchers on household food security and other outcomes of interest to WFP. The studies in Ecuador, Uganda, Niger, and Yemen were carried out over the period 2010–2012.
2. In all countries, an experimental design was used with modalities (cash, food, vouchers) randomly assigned at a locality level. Timing, frequency, and value of transfers were equalized to the extent possible across modalities, thus ensuring that differences in outcomes were attributable to the modality and not other confounding factors. All pilots took place in localities with well-functioning grain markets.
3. There are ten core findings:
 - i. There is no one “right” transfer modality. The relative effectiveness of different modalities depends heavily on contextual factors such as the severity of food insecurity and the thickness of markets for grains and other foods. The choice of modality should reflect the precise dimension of household food security (quantity of calories or dietary quality) that the intervention seeks to address.
 - ii. In assessing alternative modalities, there needs to be explicit consideration of the trade-off between increasing quantity of food available and quality of diet. In three of four countries studied (Ecuador, Uganda, Yemen), cash had a relatively larger impact on improving dietary diversity as did vouchers in Ecuador, but in the fourth country (Niger), food had a larger impact on dietary diversity. By contrast, in two countries, food had a relatively larger impact in terms of increasing quantity of calories available for consumption at the household level.
 - iii. We found no evidence that beneficiaries “always” prefer one type of modality; beneficiary preferences were context dependent.
 - iv. If we exclude the cost of procuring food, we find that cash transfers are always cheaper to deliver than food. The magnitude of these cost differences is large. On a per transfer basis, cash costs \$2.91 less to deliver to a beneficiary in Uganda, \$6.28 in Yemen, \$8.47 in Ecuador, and \$8.91 in Niger. Where WFP procurement of food is less expensive than food purchases by beneficiaries in local markets, this cost differential will narrow. However, our data suggest that as WFP obtains further experience with cash transfers, the costs of providing cash transfers will be significantly reduced, which will instead widen this cost differential.
 - v. We found no systematic evidence that private costs to accessing payments (time spent to reach pay points; time spent waiting for payments) differed by modality. Instead, these costs are largely driven by decisions by program staff regarding the siting of payment points.

- vi. We did not systematically assess impact of cash or food on local markets. Qualitatively, we found no adverse effects, but we note that the size of transfers was small relative to local markets and these pilots were temporary interventions.
- vii. We found virtually no evidence that beneficiaries sell their food rations.
- viii. There is no meaningful evidence that cash transfers are used for undesirable purposes such as buying beer (Uganda) or qat (Yemen).
- ix. We find evidence that use of cash transfers for improved food security is not mutually exclusive with use of cash transfers for other beneficial purposes. Cash can simultaneously contribute to improved diets and a range of other benefits, including reductions in children's anemia and improvements in early childhood cognitive development (Uganda).
- x. There is no evidence that different modalities have adverse impacts on women's intrahousehold decisionmaking (Ecuador, Yemen) or social tensions between host and refugee communities (Ecuador).

2. The Pilot Projects

4. The four countries were chosen to cover the range of contexts in which WFP works. In Ecuador, the pilot was undertaken in an urban area with a refugee population, with easy access to banks and food markets selling a wide range of foods. The study in Niger represents a rural, "classic Sahelian food security setting" with very poor households facing severe seasonal food shortages. Beneficiary households were somewhat isolated but with reasonable access to markets selling basic grains. The Uganda study was also undertaken in a rural setting, but was, in addition, a post-conflict area. Households had some access to markets but with a limited range of available foods. The Yemen intervention took place in a poor and conflict-prone setting where there were concerns that cash would be used to purchase qat, a mild narcotic that is widely consumed.
5. The goal of the pilots was to keep all aspects of the interventions the same except for the transfer modality (cash, vouchers, or food), so that differences in impacts could be ascribed to modality and not to other confounding factors. The value of the transfers, the frequency, and the payment dates would ideally be the same. Beneficiaries were also randomly assigned to receive different transfer types.
6. In two of the countries, the intervention design consists of control groups (Ecuador and Uganda), which made it possible to study the impact of each modality relative to no transfer. In all countries the impact of cash (and for Ecuador vouchers) could be studied relative to food.
7. In **Ecuador**, unconditional transfers were made in two northern provinces (Carchi and Sucumbíos) with large concentration of Colombian refugees and poor host Ecuadorians. Beneficiaries were randomized at barrio level to receive: \$40 cash transfers that were accessed from ATMs using a debit card, \$40 in vouchers redeemable for specified foods in supermarkets, \$40 in food: rice (24 kg), vegetable oil (4ℓ), lentils (8 kg), and canned sardines (8 cans of 0.425

kg). Transfers were received monthly for a six month period. All beneficiaries received nutrition sensitization training. Roughly 75 percent of beneficiaries were women.

8. In **Niger**, transfers were provided conditional on public works for three months (all households) and unconditionally for three months (targeted households) in Mirriah departement, Zinder region, where there are high levels of chronic and transitory food insecurity. Beneficiaries were randomized at the worksite level to receive a cash payment of 25,000 FCFA (\$55) per month or an in-kind payment of 87.5 kg cereals, 18 kg of pulses, and 3.5 kg vegetable oil and salt. Payments were made every two weeks during public works and monthly for unconditional transfers. Transfers were mostly made to household heads of whom approximately 75 percent were male and 25 percent female.

9. In **Uganda**, transfers were linked to children's enrolment in Early Childhood Development (ECD) centers (preschools) in three districts of Karamoja – a poor, rugged, post-conflict sub-region in Eastern Uganda with high seasonal food insecurity. For each child aged 3–5 years enrolled in preschool, beneficiaries were randomized at the preschool level to receive: 25,500 UGX (\$10.25) in cash, added electronically to mobile money cards; or 25,500 UGX worth of food: multiple-micronutrient fortified corn soya blend (CSB), vitamin-A fortified oil, and sugar. A control group of households with children enrolled in preschool but receiving no transfer were also surveyed. Transfers were distributed every six to eight weeks for 12 months (six transfer cycles). Transfers were made preferentially to the child's mother.

10. In **Yemen**, unconditional transfers were distributed in rural districts of two governorates (Hajjah and Ibb) with high baseline levels of food insecurity. Randomization was done at the Food Distribution Point (FDP) level. Each FDP is a school serving a cluster of neighboring villages. Cash and food groups received three transfers each: a cash transfer of 10500 YER (\$49) every two months beginning in November 2011; or a food basket consisting of 50 kg of fortified wheat flour, 5ℓ of oil in August 2011, October 2011, and April 2012. 19 percent of households had female heads.

11. Three core research questions were addressed in all four pilots. Additional research questions were considered in some countries but not all, depending on context. These questions are listed in Table 1.

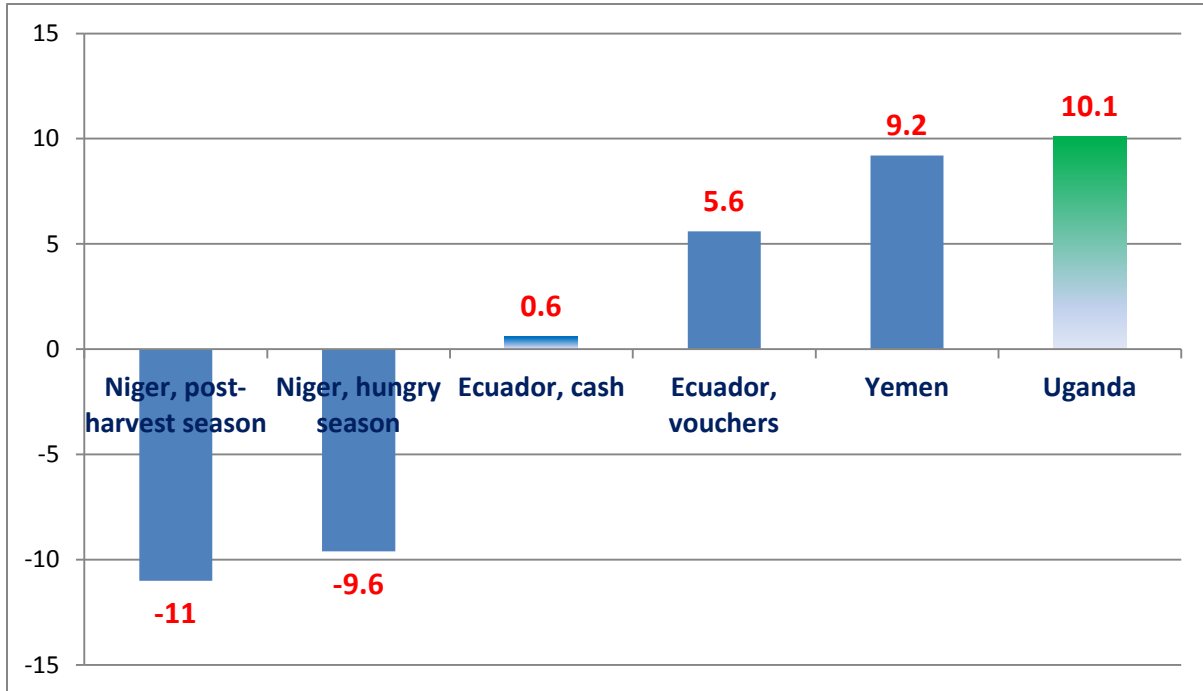
Table 1 Research questions addressed

	Ecuador	Niger	Uganda	Yemen
Core research questions				
How do benefits of cash (vouchers) compare to food transfers?	Y	Y	Y	Y
Does the delivery of cash (vouchers) cost less than food transfers?	Y	Y	Y	Y
Household preferences for modality	Y	Y	Y	Y
Additional research questions: How does receipt of cash/food/vouchers affect:				
Intrahousehold decisionmaking (gender)	Y			Y
Economic and social relations between households	Y	Y		
Who is selected to receive transfers		Y		
Anemia	Y		Y	
Child anthropometric status			Y	
Early Childhood Development outcomes			Y	
Purchase of agricultural inputs		Y		
Expenditures on undesirable goods			Y	Y

3. General Results

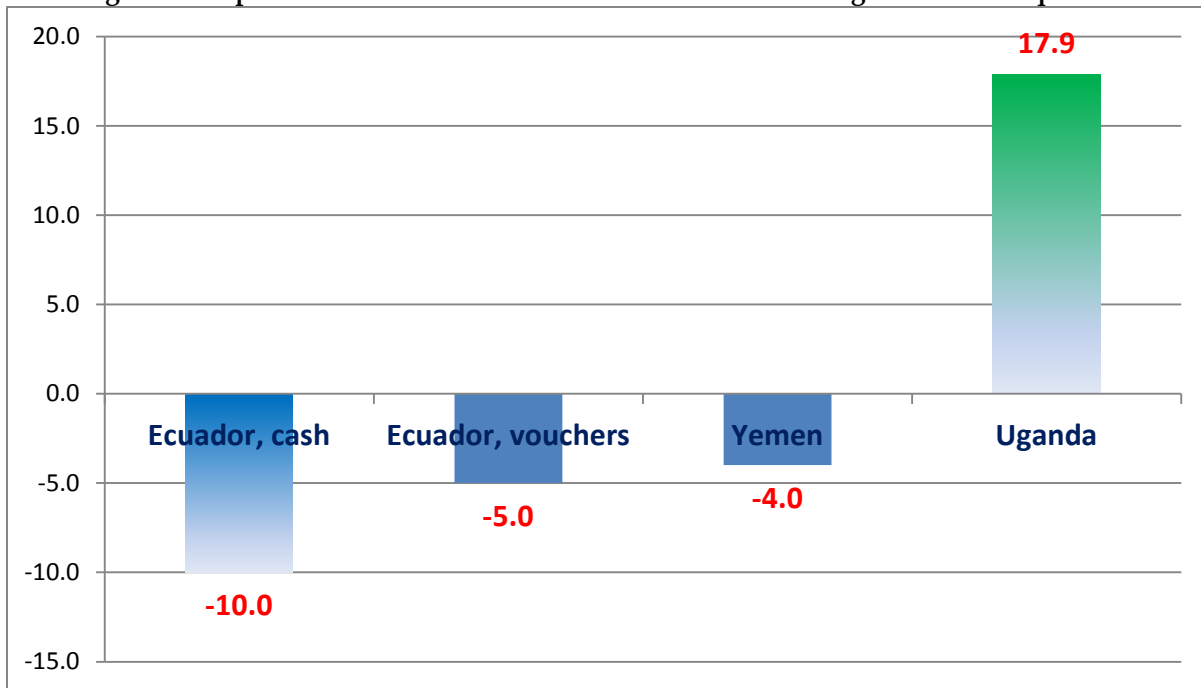
12. To assess impacts on food security, all pilot studies measured WFP’s principal food security indicator, the Food Consumption Score (FCS). The FCS combines information on food diversity, food frequency (the number of days each food group is consumed) weighted by the relative nutritional importance of different food group. It ranges in value from zero to 112 with higher values indicating better food security status. Households with values below 21 (28 in Yemen) have poor food security status; values between 21 and 35 are considered borderline. Baseline mean values of FCS were 36 (Uganda), 41 (Niger), 49 (Yemen), and 59 (Ecuador).
13. Figure 1 shows the impact of cash transfers, relative to food, on the percentage change in the FCS. In Uganda and Yemen, cash transfers had a larger effect on the FCS relative to food. In Ecuador, vouchers had a larger effect relative to food, while cash and food has essentially equal effects. In Niger, cash transfers had a smaller effect on the FCS relative to food.

Figure 1 Impact of cash transfers relative to food: Percentage change in FCS



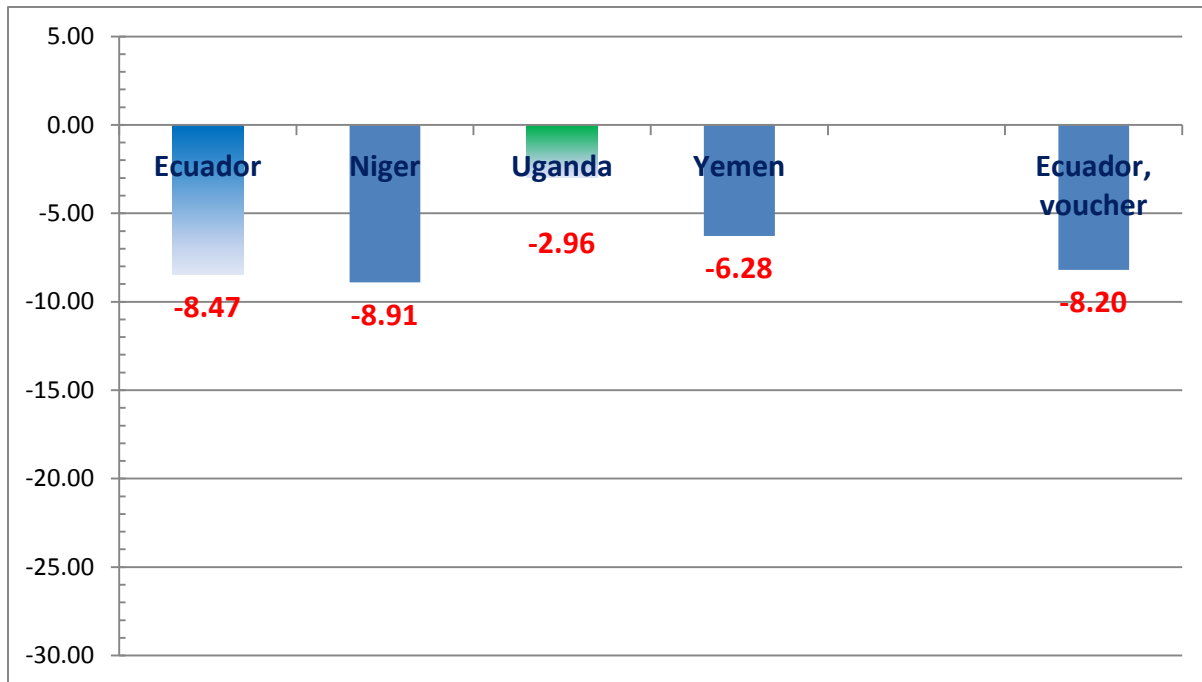
14. In three countries, data were collected on caloric availability at the household level. Figure 2 shows the impact of cash transfers, relative to food, on the percentage change in caloric availability. In Ecuador, all three modalities increased caloric availability, but food transfers had the largest impact on this outcome; thus, relative to food, cash and vouchers had a smaller effect. In Uganda, the opposite effect was observed.

Figure 2 Impact of cash transfers *relative* to food: Percent change in caloric acquisition



15. Our analysis of costs focused on *modality specific costs* (staff time, goods, services) that are specific to the delivery modality chosen. For food, these included staff and monetary costs associated with in-country transport, ration preparation, and distribution. Cash costs were those associated with contract preparation, production of debit cards, and bank transaction fees for administering transfers. Voucher costs were those associated with supermarket selection; printing vouchers; and staff costs associated with administering and liquidating vouchers. Common costs that are incurred in program implementation (planning costs, targeting, awareness activities, nutrition training, etc.) were allocated proportionately across modalities *or* are excluded.
16. Figure 3 shows cash transfer costs *relative* to a food transfer. In all countries, cash transfers were less expensive than food transfers.
17. We do not know how much it cost to procure food; if food procurement costs are significantly below the cost of food in local markets, cost differentials will narrow in favor of food. However, our data suggest that as WFP obtains further experience with cash transfers, the costs of providing cash transfers will be significantly reduced, which will instead widen this cost differential.

Figure 3 Per transfer costs of cash transfers, relative to food



4. Results by Country

4.1 Ecuador

18. All three modalities (food, cash, and vouchers) significantly improved the quantity and quality of food consumed as measured by per capita food consumption, per capita caloric intake, and dietary diversity measures, including the Dietary Diversity Index (DDI), Household Dietary diversity Score (HDDS), and the Food Consumption Score (FCS).
19. There were significant differences in the types of food consumed across the transfer types: food led to a significantly higher increase in calories, while vouchers led to significantly larger improvements in dietary diversity. Cash and vouchers increased food consumption but were used on food of lower caloric value. The increase in DDI and FCS was significantly larger for vouchers; however, the largest reduction in poor-to-borderline food security status was found in households that received food transfers.
20. The larger increase in calories from food was mainly due to larger increases in consumption of cereals (which represent 41 percent of a household's caloric intake). The larger increase in dietary diversity for vouchers was mainly due to larger increases in the number of days consuming vegetables, eggs, and milk and dairy.
21. There was no impact of food, cash, or vouchers on anemia status.

22. Compared to the control group, transfers led to a significant decrease in intimate partner violence; however, there is no impact on decisionmaking indicators. While all three transfer types led to significant decreases in physical/sexual violence, only cash and food led to significant decreases in controlling behaviors. There were no significant differences across modalities in the size of the impact for any of the intimate partner violence indicators.
23. Cash and voucher recipients spent an average of \$1.46 and \$1.65 per month, respectively, on transportation and other out-of-pocket expenses to retrieve transfers. Food recipients spent \$2.12. Cash recipients spent 45 minutes travelling to the distribution point and waiting to receive their transfers; food and voucher beneficiaries averaged 90 minutes.
24. Voucher recipients reported using 99 percent of the transfer on food consumption, compared to 83 percent for cash recipients and 63 percent for food recipients. Cash households reported that the remainder was used on nonfood expenditure (7 percent), shared with others (2 percent), or saved for later use (8 percent). Food households reported that the remainder was saved for later use (29 percent) or shared with others (7 percent). Less than 1 percent of voucher and food beneficiaries reported selling their food or voucher.
25. Cash was the modality that beneficiaries were most satisfied with; whereas vouchers were least preferred.

4.2 Niger

26. Food recipients experienced larger positive impacts on food security as measured by the Dietary Diversity Index (DDI) and the Food Consumption Score (FCS) than those receiving cash. Food recipients had an FCS on average 3.9 points higher than cash recipients in July (survey round after the public works) and 4.6 points higher in October (survey round after the unconditional transfers). The likelihood of having an acceptable food consumption score is 10.9 percentage points higher for food recipients in July and 12.1 percentage points higher in October.
27. Food recipients consumed more of the items given to them in the food basket: cereals, pulses, and oil. They also increased the frequency of their consumption of these items. There is no differential effect on the frequency of consumption of meat, dairy, fruit, or vegetables.
28. One reason that the cash recipients had less diverse diets lies in their choice of using a significant proportion of their transfers to purchase grains in bulk, the cheapest form of calories available. This is a reflection of both the extreme poverty found in this area and uncertainty regarding future food prices.
29. No differential impacts in terms of food security outcomes were found when the sample was disaggregated by gender of household head.

30. Households receiving food resorted to fewer coping strategies, such as consuming less preferred foods, reducing portion sizes served to children, or buying food on credit. This effect was more pronounced during the height of the lean season than during the growing season.
31. Food recipients spent more on nonfood items in July by the equivalent of 8 percent of the value of the monthly transfer. Across the individual items, the most noteworthy finding is that households in cash villages spent more on agricultural inputs in both the lead up to and during the main cropping season. Also, households in cash villages spent some of their transfers on repairing their dwellings in the three months prior to the July survey, in advance of the rains.
32. Cash recipients reported spending 70 percent of the transfer on food items, 10 percent on nonfood items, 9 percent on transfers to other households, saving 7 percent, and 3 percent to pay back loans. Food recipients reported consuming 78 percent of their transfer as food, giving 20 percent of the transfers to other households, and selling or exchanging the rest to obtain other food items. Only 5 percent of food recipients reported that they sold some of the food, and 13 percent that they exchanged some of the payment for other food or nonfood items. However, 85 percent of the food recipients and 33 percent of the cash recipients reported that they shared at least some of their transfers.
33. Respondents expressed an overwhelming preference for food transfers: 61 percent preferred 100 percent food, 10 percent preferred 100 percent cash, and the rest a mix. Seventy-three percent of food recipients state preferring only food, versus 50 percent of cash recipients. These preferences did not vary by gender of household head.
34. Village representatives were asked if they felt that the transfers affected local food prices. While the majority of cash recipients reported that there was no impact at all on prices, a majority of food recipients reported that food deliveries put downward pressure on food prices. This was particularly common for the prices of key staples and goods similar to those distributed, such as millet (94 percent of all villages), sorghum (97 percent), maize (66 percent), and cowpeas (83 percent). The assertions regarding grain price impacts are supported by the food price data collected at the village level.

4.3 Uganda

35. Cash transfers led to a large and significant increase in the Dietary Diversity Index (DDI) and the Household Dietary Diversity Score (HDDS) relative to the control group. Relative to the food recipients, cash transfers also caused significant increases in the Food Consumption Score (FCS).
36. Food transfers had no meaningful impact on anemia prevalence among children. Cash transfers cause significant or weakly significant reductions of anemia prevalence of moderate/severe anemia among children 4.5–6 years old.

37. Cash transfers had a significant positive impacts on several domains of cognitive development, including visual reception, receptive language and expressive language for children aged 5 years. These effects were not found for food transfers.
38. There was no meaningful evidence that cash transfers were used for undesirable purposes such as buying beer.
39. Cash transfers caused a highly significant increase in parents' reports of the number of days their ECD centers are open and the number of days their children attend ECD centers.
40. There are few differences in implicit costs of receiving transfers by transfer modality. Both food and cash beneficiaries report an average travel time of slightly more than 30 minutes to the relevant transfer collection point and slightly more than 80 minutes waiting time at the collection point.
41. The average food beneficiary consumed nearly all of the transferred food (more than 90 percent of each food type transferred), with a very small proportion saved and negligible proportions sold, given away, or used for other purposes. The average cash beneficiary spent a large proportion of the transfer on food (roughly 41 percent of the transfer value on staple foods and about 12 percent of the transfer value on non-staple foods), but also reported spending a sizeable proportion on nonfood goods (roughly 23 percent of the transfer value) and likewise saving a large amount (roughly 16 percent of the transfer value).
42. Most beneficiaries (more than 90 percent of both food and cash recipients) report preferring to receive some but not all of the transfer in the form of cash, suggesting a preference for a mix of food and cash. The mean amount of preferred cash is just over 13,000 UGX among both groups, about half of the transfer value. Preferences for CSB (the main component of the food transfer) relative to maize meal ("posho," an unfortified staple in the Karamojong diet) are very similar across food and cash beneficiaries. Most beneficiaries (more than 60 percent of both food and cash groups) report preferring to buy maize meal rather than CSB, if both are available in the same quantity at the same price.

4.4 Yemen

43. Cash beneficiaries experienced significantly greater impacts on dietary diversity, as measured by three basic indicators: Household Dietary Diversity Score (HDDS), Dietary Diversity Index (DDI), and Food Consumption Score (FCS). Among the three, the cash advantage was largest for FCS, where the impact of cash transfers was 9 percent higher than on food transfers. Children in cash beneficiary households also consumed a wider variety of foods and were 16 percent more likely to obtain a minimally diverse diet.
44. Food beneficiaries consumed approximately 100 more calories per person per day than cash beneficiaries, although the total value of the consumed food was similar across both groups. The higher caloric consumption for food households stemmed entirely from the

consumption of food basket items: wheat and oil. Cash recipients , however, consumed significantly higher caloric levels of non-wheat cereals (52 percent), animal products (27 percent), and pulses and tubers (40 percent). Expenditure patterns matched these consumption differences, as cash households not only spent significantly larger sums on food basket items, but also on non-basket items such as rice (42 percent) and meat (73 percent).

45. No significant differences in patterns of nonfood consumption or expenditure emerge by modality. In particular, there was no difference in qat expenditure or usage between food and cash recipients.
46. No significant impacts by transfer type on women’s decisionmaking could be detected.
47. Cash distribution points were more widely dispersed than food distribution points. Consequently, cash beneficiaries traveled much longer and spent significantly more money to acquire their benefits. The discrepancy was particularly acute in one of the governorates (Hajjah), where cash beneficiaries spent five times more than food beneficiaries and 10 percent of their transfer amount on transportation and related expenses.
48. The vast majority of the food transfer (69 percent) is reported to be consumed immediately, with another 28 percent saved for consumption beyond two weeks. Cash recipients reported spending 88 percent on staple foods, 5 percent on debt repayments, 2 percent on nonfood goods, and 2 percent on transportation.
49. The majority of food beneficiaries began the program in favor of a transfer compromised fully of food, but by the end, an all-cash transfer proved the most popular option. Despite the higher costs of reaching cash transfer points, cash beneficiaries overwhelmingly favored an all-cash transfer (80 percent) by the end of the pilot.