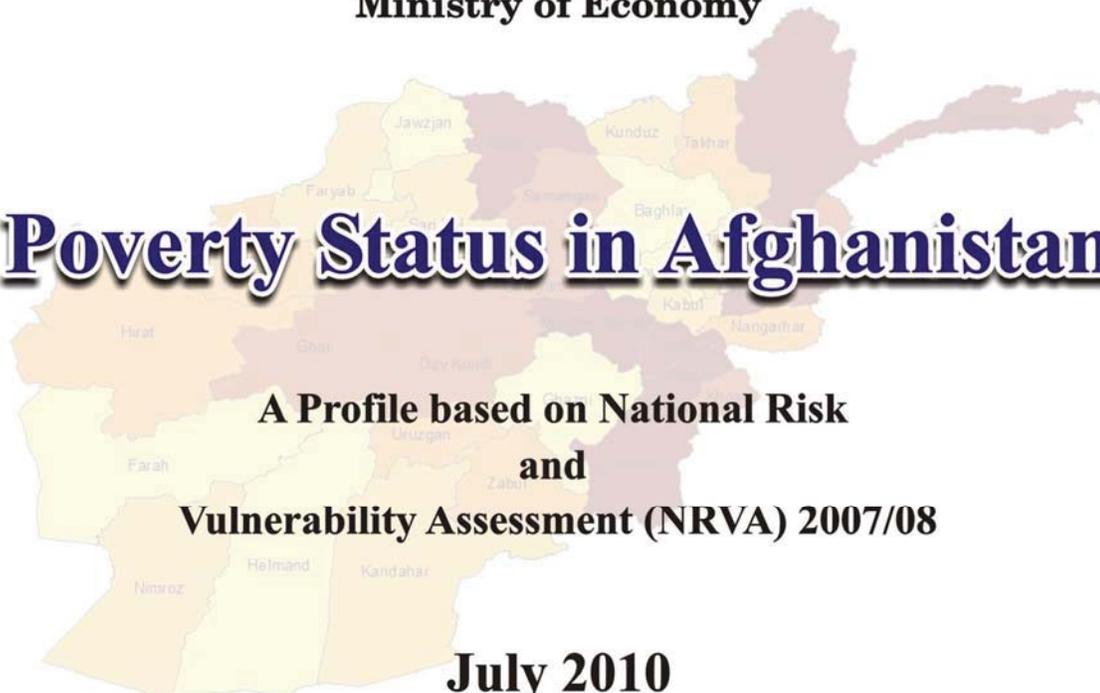




Islamic Republic of Afghanistan  
Ministry of Economy

# Poverty Status in Afghanistan



A Profile based on National Risk  
and  
Vulnerability Assessment (NRVA) 2007/08

July 2010



The World Bank  
Economic Policy & Poverty Sector  
South Asia Region

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**Islamic Republic of Afghanistan**

**Ministry of Economy**

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A Profile based on the National Risk and Vulnerability Assessment (NRVA) 2007/08

**July 2010**



The World Bank  
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South Asia Region

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## سپاسگذاری

این گزارش نتیجه تلاش و همکاری های مشترک وزارت اقتصاد جمهوری اسلامی افغانستان و بانک جهانی میباشد. این گزارش محصول کار و زحمات سکرتور اقتصادی بانک جهانی به رهبری آقای دین جولف و به همکاری تیم کاری متشکل از اندی کوتیکولا و سلویا ریدیلی از تیم پالیسی اقتصادی و فقر منطقه آسیای جنوبی بانک جهانی، میباشد. اساعیل رحیمی، رئیس عمومی پالیسی، نظارت و ارزیابی استراتژی انکشاف ملی افغانستان در وزارت اقتصاد، نقش کلیدی را در تنظیم و تدویر کمیته تخنیکي تخمین سطح فقر و تهیه این گزارش داشته است. تیم تهیه کننده این گزارش نظریات متعدد را در مورد مسوده سند فقر از اعضای کمیته تخنیکي تخمین سطح فقر بدست آوردند که این اعضا شامل نمایندگان دولت از اداره مرکزی احصائیه، وزارت اقتصاد، وزارت احیاء و انکشاف دهات، وزارت مالیه، وزارت کار و امور اجتماعی، و همچنان نمایندگان از اتحادیه اروپا، همکاریهای انگلستان برای انکشاف بین المللی، بانک جهانی، بانک انکشاف آسیائی، یوناما، و جایکای جاپان میباشد. این تیم از حمایت و رهنمودهای نیکولاس کرفت، رئیس بانک جهانی در افغانستان، و جوزف بسینت، مدیر ارشد اداری، نیز تشکری میکند. همچنان، تیم از آقای اسدالله زرمالوال و آقای فردین صدیقی و سایر کارمندان ریاست عمومی پالیسی، نظارت و ارزیابی استراتژی انکشاف ملی افغانستان و میریا پگاتو، مدیر سکرتوری، و جان نیومن، اقتصاددان ارشد در امور فقرزدائی برای همکاری های ارزشمند شان نیز تشکری مینماید. از سهم فعال انا دیسوزا، اورسولا کسبن، سیو یون هانگ، کینون سکات، وین کتس سنדרارمن نیز در تهیه این گزارش قدردانی صورت میگردد. کار روی اعداد و ارقام در ارتباط به معلولین از طرف صندوق وجهی انکشاف پایدار اجتماعی و محیطی تمویل گردیده است و کار روی اعداد و ارقام در ارتباط به جندر از طرف پلان کاری بانک جهانی در مورد جندر، تمویل گردیده است. یقیناً، بدون زحمات و تلاشهای بی پایان کارمندان اداره مرکزی احصائیه و انکشاف دهات، و بدون همکاریهای مالی اتحادیه اروپا، پروگرام غذائی جهان، همکاریهای انگلستان برای انکشاف بین المللی، بانک انکشاف آسیائی و بانک جهانی در جهت تطبیق سروی ملی خطرات و آسیب پذیری 1386/87، تهیه این گزارش امکان پذیر نبود.

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افتخار دارم تا به نمایندگی از مردم افغانستان این گزارش وضعیت فقر در افغانستان را که بر اساس سروی ملی خطرات و آسیب پذیری ۱۳۸۶/۸۷ تهیه گردیده است، ارائه نمایم. فقرزدائی یکی از اهداف کلیدی استراتژی انکشاف ملی افغانستان میباشد. سند فقر یک عنصر عمده معلوماتی برای پالیسی سازان در هنگام طرح و انکشاف پالیسی ها برای فقرزدائی میباشد. سند فقر یک روش معیاری برای توضیح وسعت و نوعیت فقر در یک کشور و یا منطقه میباشد. این سند حجم و توزیع فقر را در محوطه جغرافیائی، اقتصادی و اجتماعی بررسی نموده و در مورد مشخصات فقر، عدم مساوات آن میان فقراء و سایر موارد مرتبط به فقر معلومات ارائه میدارد.

این گزارش در یک وقت مناسب نشر گردیده است زیرا که دولت افغانستان در حال حاضر اولویت بندی استراتژی انکشاف ملی افغانستان را از طریق روند کلسرها و انکشاف برنامه های ملی قابل تمویل روی دست گرفته است. تخمینات در این گزارش میتواند برای نظارت و ارزیابی از برنامه های کاهش فقر در آینده منجیث معلومات وضعیت موجوده مورد استفاده قرار گیرد. همچنان دریافت ها در این گزارش میتواند تحلیل مبتنی بر شواهد را برای وزارت خانه ها جهت دقت بیشتر در هنگام طرح و انکشاف برنامه های کاهش فقر، ارائه نماید.

وزارت اقتصاد جمهوری اسلامی افغانستان با استفاده از این فرصت از شرکای کاری جامعه بین المللی برای همکاریهای دایمی شان در قبال بازسازی و انکشاف افغانستان، اظهار قدردانی و امتنان مینماید. مشخصاً، از حمایت مالی و تخنیکی بانک جهانی، اتحادیه اروپا، همکاری های انگلستان برای انکشاف بین المللی، پروگرام غذایی جهان، یوناما و سایرین در راستای تدویر و تطبیق سروی ملی خطرات و آسیب پذیری و تهیه این گزارش سپاسگذاری مینمایم. به امید همکاری های دایمی با شرکای بین المللی در آینده.



نیکولاس کورف

رئیس بانک جهانی



عبدالهادی ارشد

وزیر اقتصاد

## Forward

On behalf of the Citizens of the Islamic Republic of Afghanistan, it is a pleasure to present this report on Poverty Status in Afghanistan based on the National Risk and Vulnerability Assessment (NRVA) 2007/08. Poverty reduction is one of the key objectives of the Afghanistan National Development Strategy (ANDS), and a poverty profile is an important element in the information kit of the policymaker that helps focus policy to attain this objective. A poverty profile is standard methodology to describe the extent and nature of poverty in a country or region. It assesses the magnitude of poverty and its distribution across geographic and socioeconomic domains, provides information on the characteristics of the poor, illustrates the heterogeneity among the poor, and identifies correlates of poverty.

The release of this report is very timely because the Government of Afghanistan is now prioritizing the ANDS through the clustering process in which programs are being developed for donor funding. The poverty estimates in this report can further serve as a baseline for the monitoring and evaluation of future poverty-reduction programs. The findings in this report also provide definitive, evidence-based analysis that we believe can serve as a valuable input to the line Ministries to improve the pro-poor focus of their programs.

The Ministry of Economy of the Islamic Republic of Afghanistan also wishes to take this opportunity to take this opportunity to express its continued appreciation to the international community partners working towards the reconstruction and development of Afghanistan. In particular, we wish to thank the European Union (EU), UK Department for International Development (DfID), World Food Programme (WFP), United Nations Assistance Mission in Afghanistan (UNAMA) and others for their financial and technical support to the NRVA and in turn, the development of this report. We look forward to continuing our collaborative work with our distinguished partners in the future.

Sincerely,

Abdul Hadi Arghandiwal

Minister of Economy

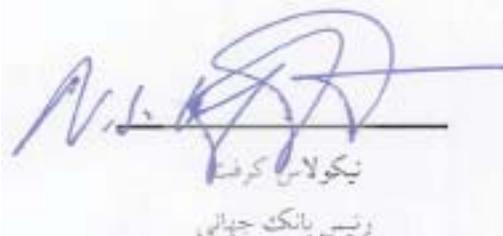
and

Nicholas Krafft

World Bank Country Director for Afghanistan



Abdul Hadi Arghandiwal  
وزیر اقتصاد



Nicholas Krafft  
رئیس بانک جهانی

## فشرده گزارش

کاهش فقر یکی از سه هدف عمده ستراتیژی ملی انکشافی افغانستان میباشد. شرح فقر یکی از عناصر مهم در مجموعه معلوماتی پالیسی سازی میباشد که در تمرکز پالیسی برای نایل آمدن به این هدف کمک میکند. شرح فقر یکی از روش های معیاری برای توضیح وسعت و خصوصیت فقر در یک کشور یا یک منطقه میباشد که میزان و گستردگی فقر را در محدوده های جغرافیایی و اجتماعی-اقتصادی مورد ارزیابی قرار داده، در مورد خصوصیات طبقه بی بضاعت معلومات ارایه نموده، و عدم همگونی میان افراد فقیر را بر ملا میسازد.

یکی از گزارش های اخیر سازمان غیر حکومتی آکسفام (سال ۲۰۰۹) که توسط شبکه های خبری مهم مانند بی بی سی و رویترز نشر گردیده حاکی از آنست که اکثریت افغانها به این نظر اند که طالبان نه بلکه فقر یکی از عوامل عمده درگیری های فعلی در افغانستان میباشد. اما تا اکنون، وسعت و بُعد فقر در افغانستان ناتکمیل میباشد. درک ما از فقر در افغانستان با عدم موجودیت ارقام مربوط به وضعیت زندگی خانواده ها محدود شده است.

ارزیابی ملی خطرات و آسیب پذیری (NRVA) برای سال های ۱۳۸۶ و ۱۳۸۷ که اخیراً منتشر گردیده این کمبود ارقام را رفع نموده و نشان میدهد که میزان ملی فقر در افغانستان ۳۶ فیصد میباشد، بدین مفهوم که تقریباً ۹ میلیون افغان قادر به رفع نیازمندی های اساسی زنده گی روزمره شان نمیباشند. بطور اوسط، طبقه فقیر میتوانند صرف ۷۸ فیصد مصارف تخمینی نیازمندی های اساسی شانرا به مصرف برسانند. در حالیکه ۳۶ فیصد مردم افغانستان نمیتوانند نیازمندی های مصرفی شانرا رفع نمایند، و تعداد زیادی دیگر مردم وجود دارند که در معرض خطر دچار شدن به فقر میباشند. یک ضربه بسیار کوچک و منفی میتواند تعداد زیادی از مردم را به کام فقر فرو ببرد.

این گزارش ولایات را به پنج کتگوری تقسیم میکند که درین میان ولایاتی اند که سطح فقر در آنها پایین بوده و کمتر از ۲۰ فیصد نفوس شان بی بضاعت میباشند، و ولایاتی اند که سطح فقر در آنها بسیار بلند بوده و میزان آن به بیش از ۵۷ فیصد میرسد. ولایاتی که سطح فقر در آنها پایین میباشد در نقاط مختلف کشور، منجمله ولایت هلمند در جنوب غرب، ولایت فراه در غرب، ولایت جوزجان در شمال و ولایت بغلان در شمال شرق کشور بشکل پراکنده واقع گردیده اند. ولایاتی که سطح فقر در آنها بلند میباشد بیشتر بشکل کلستر (خوشه ای) موقعیت دارند، مانند ولایات همجوار پکتیکا، پکتیا، لوگر و وردک در مناطق جنوبی و مرکزی؛ و ولایات همجوار شرقی کنرها و لغمان میباشند.

تفاوت های منطقی و فصلی مهم ترین عناصر فقر در افغانستان بشمار میروند. درجه حرارت در جریان فصل های مختلف بشکل قابل ملاحظه متفاوت بوده، فصل تابستان بسیار گرم و فصل زمستان سرد و یخبندان میباشد. به همین ترتیب در مناطق مختلف در ارتفاع و شکل اراضی نیز تفاوت های کلی وجود دارد. هر دوی این عناصر با نتایج فقر وابسته بوده و در بعضی موارد این عناصر بر رفاه عامه تأثیرات مستقیم برجا میگذارند. بطور مثال، زمستان شدید راه های مواصلاتی را متأثر ساخته و در مناطق کوهستانی، مانند ولایات بامیان، دایکندی و بدخشان، اکثراً

شاهراه ها در اثر تراکم زیاد برف در طول فصل زمستان مسدود میشوند. درین محلات مردم صرف بر مواد غذایی که خانواده ها قبل از فرارسیدن فصل زمستان ذخیره نموده اند، متکی میباشند. جای تعجب نیست که درین سه ولایت میزان فقر به مراتب بلند تر از حد اوسط در سطح کشور میباشد.

ازینکه ارزیابی NRVA سال ۱۳۸۶ و ۱۳۸۷ در طول سال انجام یافته، این سروی میتواند در مورد تغییرات در وضعیت رفاهی مردم در جریان فصل های مختلف سال و نحوه زندگی مردم در اوقات پرمشقت، معلومات کافی ارایه نماید. در تابستان سال ۱۳۸۶، میزان فقر ۲۱ فیصد تخمین گردیده بود. این رقم به مراتب کمتر از میزان تخمینی ۳۶ فیصد میباشد زیرا این رقم سطح رفاه عامه را بعد از برداشت محصولات زراعتی در فصل خزان نشان میداد. زمانیکه در افغانستان زمستان فرا رسید، میزان فقر در ربع دوم به ۳۲ فیصد افزایش یافت. ۴۰ فیصد خانواده ها در طول دو ماه زمستان از منابع عایداتی عمده شان درآمدی بدست نمی آورند. چنانچه توقع میرود، خانواده های روستایی بیشتر در معرض خطرات فصلی قرار دارند زیرا این مردم قسمت عمده عایدات شانرا از فعالیت های زراعتی بدست آورده و در طول نصف سال نمیتوانند منابع عمده امرار معیشت شانرا حفظ نمایند.

تأثیرات فصلی و افزایش قیمت مواد غذایی در جریان ربع های سوم و چهارم این ارزیابی با یکدیگر وابسته میباشد. این هر دو تأثیر باعث کاهش قابل ملاحظه در سطح رفاه عامه گردیده و مصارف واقعی برای مواد غذایی بیش از یک بر سه برابر کاهش یافته و میزان فقر در طول سال بیش از دو چند گردید. تحلیل های بیشتر بررسی خواهد نمود که مردم افغانستان چگونه با این تغییرات گسترده و بزرگ دست و پنجه نرم نموده و این معلومات میتواند در ایجاد پالیسی ها جهت رسیدگی به نتایج ناگوار قیمت های گزاف مواد غذایی کمک نماید.

زراعت در اقتصاد افغانستان حایز اهمیت زیاد میباشد. ارقام جمع آوری شده از NRVA ۱۳۸۶ و ۱۳۸۷ نشان میدهد که ۳۶ فیصد خانواده ها بر زراعت به مثابه منبع عمده عایداتی، متکی میباشند، در حالیکه برای ۶ فیصد دیگر مزد زراعتی منبع عمده عایداتی میباشد. این ارزیابی نشان میدهد که وابستگی اقتصادی با سطح پایین شهر نشینی مرتبط میباشد، یک نکته قابل توجه است که بیش از نصف خانواده هائیکه زراعت را منحصیث منبع عمده عایداتی شان می پندارند، زارعینی میباشند که صرفاً از همین راه امرار معاش مینمایند.

در افغانستان، مانند بسیاری از کشور های روبه انکشاف، کارگران عمده ترین وسیله برای بدست آوردن عاید در خانواده ها میباشند. براساس ارقام NRVA، ۶۷ فیصد افراد یکه واجد شرایط کار (۱۶ ساله و بالاتر از آن) میباشند، در بازار کار فعالیت مینمایند، ۶۲ فیصد افراد واجد شرایط کار در جریان ماه قبل از ارزیابی در انواع دیگر وظایف مشغول بوده و ۷،۹ فیصد نیروی کار بیکار بوده اند. میزان پایین بیکاری با میزان بیکاری انعده اشخاصیکه شغل دوامدار ندارند (نیمه بیکار) بخصوص در روستا ها ارتباط مستقیم دارد. بیش از ۴۸ فیصد افراد استخدام شده بطور اوسط کمتر از ۳۵ ساعت در یک هفته کار میکنند، که میتوان آنها را "نیمه بیکار" نامید. نیمه بیکاری خاصاً در مناطق روستایی بسیار زیاد بوده و ۵۳ فیصد کارگران را در بر دارد. در خانواده های فقیر تر بطور اوسط تعداد زیاد اعضای آنها در بازار کار فعالیت نموده و هم تعداد زیاد آنها نیمه

بیکار اند. برای افرادی که در خانواده های فقیرتر زندگی می کنند و به نحوی در فعالیت های عایداتی مصروف اند بیشتر یک انتخاب نبوده بلکه مجبور به آن شغل رو آورده اند.

کار های شاقه اطفال در افغانستان بیشتر پسران را متأثر ساخته و در بازار های کار روستائی میزان آن بلند تر میباشد. از جمله حدود ۸ میلیون طفل بین سنین ۶ الی ۱۵ ساله، ۱۸ فیصد آنان در فعالیت های مختلف اقتصادی مشغول میباشند (انان در کار در مقابل پول، تجارت های خانوادگی، صنایع دستی، کمک در زراعت یا مالداري یا جمع آوری پول در سرک ها مصروف میباشند). کار اطفال طبقه ذکور نسبت به طبقه اناث تقریباً دو چند بوده و کار اطفال در مناطق روستائی نسبت به مناطق شهری سه برابر میباشد. در مناطق روستائی، بنظر نمیرسد که میان وضعیت فقر و احتمال موجودیت اطفال کارگر در یک خانواده ارتباطی وجود داشته باشد. اما در مناطق شهری میان این دو ارتباط اندکی وجود دارد که در خانواده های فقیر تر میزان کار اطفال بیشتر میباشد.

در افغانستان خصوصیات محرومیت و آسیب پذیری دارای بُعد قوی جندر میباشد. در حالیکه درک بهتر مسایل مربوط به جندر مستلزم تحلیل و تجزیه بیشتر ارقام میباشد، احصائیه های توضیحی نشان میدهد که زنان به منابع تولیدی دسترسی و اختیار محدود تر دارند. از همه مهمتر، در افغانستان زنان به تعلیم و تربیه دسترسی محدود دارند. میزان سواد در میان زنان بین ۱۵ الی ۲۴ ساله ۲۲ فیصد میباشد، که این رقم در میان مردان به ۵۱ فیصد میرسد. همینگونه، میزان شمولیت به مکاتب برای دختران بین ۶ الی ۹ ساله ۲۸ فیصد کمتر از پسران میباشد (۳۱ فیصد در برابر ۴۳ فیصد). یکی از یافته های عمده، در رابطه به کاهش این خلاء ها، اینست که بهبود در دستاورد های آموزشی برای زنان نسبت به مردان کمتر بوده است. این روند حاکی از آنست که خلاء های مربوط به جندر بدون تمرکز به موضوع جندر میتواند گسترده تر شود. عدم دسترسی به تعلیم، همراه با موانع فرهنگی، به این مفهوم است که زنان هنوز هم آماده شرکت در بازار کار نبوده و دارای فرصت های اقتصادی کمتر میباشند. مشارکت نیروی کار زنان تقریباً نصف مردان بوده (۴۶ فیصد در مقابل ۸۶ فیصد میباشد)، و این خلاء در مناطق شهری که صرف ۱۹ فیصد زنان بشکل فعال در بازار کار فعالیت مینمایند، بیشتر تکان دهنده میباشد.

در رابطه به اینکه آیا بصورت عموم خدمات به مردم بی بضاعت عرضه میشود یا خیر، این ارزیابی در سکتور های معارف و صحت تفاوت های قابل توجه را نشان میدهد. در سکتور معارف، میزان عمومی شمولیت در مکاتب ابتدایی هنوز هم پایین بوده و ۳۷ فیصد میباشد (برای اطفال بین ۶ الی ۹ ساله). اما میزان شمولیت در مکاتب برای پسران و دختران در مناطقی که مردم از جمله ۲۰ فیصد غریب ترین نفوس را تشکیل داده و در مناطقی که ۶۰ الی ۸۰ فیصد نفوس انرا مردم ثروتمند تشکیل میدهد، مساوی میباشد. بررسی موضوع اشتراک اطفال در مکاتب و یا اشتغال کاری حاکی از آنست که ضرورت کار کردن اطفال عامل میزان پایین شمولیت در مکاتب نمیشد. ۴۲ فیصد اطفال بین سنین ۶ الی ۱۵ ساله نه به فعالیت های اقتصادی مشغول اند و نه مصروف درس خواندن در مکاتب اند.

در مقایسه با میزان شمولیت در مکاتب، زمانیکه دسترسی به خدمات صحتی مد نظر گرفته میشود، تفاوت های جدی در میان طبقه فقیر و طبقه غیر فقیر وجود دارند. خاصاً با در نظر داشت اینکه

افغانستان از جمله کشور هائیسست که دارای بلند ترین میزان مرگ و میر کودکان و اطفال میباشد، دسترسی به خدمات صحتی قبل از ولادت و مراقبت های صحتی مسلکی در وقت ولادت دو فعالیت سودمند در برنامه صحتی میباشد. در هر دو مورد وضعیت افراد بی بضاعت نسبت به افراد نسبتاً ثروتمند بسیار وخیم میباشد. صرف ۲۴ فیصد فقیر ترین مادران به خدمات بعد از ولایت دسترسی دارند. این رقم در میان ۲۰ فیصد نفوس کشور که بین ۶۰ الی ۸۰ فیصد آنان را مردم نسبتاً ثروتمند تشکیل میدهند، تقریباً به دو برابر (۴۲ فیصد) میرسد. همینگونه، صرف ۱۰ فیصد بی بضاعت ترین مادران در جریان ولادت به خدمات مسلکی دسترسی دارند؛ این رقم برای افرادی که ۶۰ الی ۸۰ فیصد شان به این خدمات دسترسی دارند، سه برابر (۳۱ فیصد) میباشد.

برای تأیید و پذیرش اهمیت پالیسی مربوط به معیوبیت و جهت رسیدگی به حقوق و نیازمندی های افراد دارای معیوبیت، دولت افغانستان پلان ملی کاری مربوط به معیوبیت (ANDAP) را برای سال های ۲۰۰۸-۲۰۱۱ پیش نویس نمود. با در نظر داشت میزان پایین دسترسی به مراقبت های صحتی و دهه های متمادی جنگ، ارقام NRVA نشاندهنده میزان نسبتاً پایین معیوبیت در کشور میباشد. ۵،۲ فیصد افغانها اظهار داشتند که آنها دارای معیوبیت خفیف بوده که تعداد این افراد به ۱،۳ میلیون نفر میرسد، و ۱،۶ فیصد افغانها از معیوبیت های جدی خبر دادند که تعداد شان به چهار صد هزار نفر میرسد. بر علاوه میزان انفرادی معیوبیت، با میزان معیوبیت را در سطح خانواده ها تخمین نموده ایم که بر مبنای این حقیقت استوار میباشد که آیا یک خانواده دارای حد اقل یک نفر معیوب میباشد یا خیر. میزان شیوع معیوبیت در سطح خانواده یکی از موارد مهم میباشد زیرا یک عضو معیوب یک خانواده میتواند به فشار های اقتصادی و روانی خانواده بیافزاید زیرا مصارف گزاف خدمات صحتی مناسب برای عضو معیوب مستلزم کمک اقتصادی سایر اعضای خانواده میباشد. بیش از یک ربع خانواده ها (۲۸،۴ فیصد) دارای حد اقل یک عضو نسبتاً معیوب بوده و ۱۰ فیصد خانواده ها حد اقل یک نفر معیوب دارند.

با رقم بلند مرگ و میر کودکان و اطفال، و سطح بلند سوء تغذی (یکی از شواهد اشکار ان بلند ترین میزان قد کوتای افغانها در مقایسه با سایر کشور میباشد)، دسترسی به آب آشامیدنی صحتی برای وضعیت صحتی افراد بسیار مهم میباشد. یکی از عوامل عمده سوء تغذی و وفیات اطفال در جهان مرض اسهال میباشد، که با بهبود بخشیدن دسترسی به آب پاک آشامیدنی و حفظ الصحه میتوان از تعداد زیادی این وفیات جلوگیری بعمل آید. در رابطه به مناطق روستائی در افغانستان، کمتر از ۲۰ فیصد مردم به آب آشامیدنی صحتی (آب بمبه های دستی، چاه های برمه ای، جوی های سرپوشیده و آب نل) دسترسی دارند. در مناطق روستائی، سطح دسترسی به آب صحتی برای مردم بی بضاعت و ثروتمند بسیار پایین میباشد (که از ۱۸ الی ۲۱ فیصد میباشد). این امر حاکی از آنست که مسئله دسترسی به آب صحتی آشامیدنی در مناطق روستائی عمدتاً یک موضوع مربوط به مسایل آبرسانی میباشد. برخلاف در مناطق شهری، حدود ۳۹ فیصد مردم فقیر (که ۲۰ فیصد غریب ترین نفوس را تشکیل میدهد) به آب صحتی دسترسی داشته و این رقم در میان ۲۵ فیصد افراد ثروتمند به ۶۶ فیصد میرسد.

در طول سال های گذشته NRVA بشکل تدریجی تکامل یافته که در یافت ها و شاخص های عمده آنان با یکدیگر مقایسه نمیشوند. بخصوص، NRVA ۱۳۸۶ و ۱۳۸۷ دارای یک بخش وسیع مصرف کالا ها میباشد که زمینه اندازه گیری مکمل تر مصارف مجموعی کالا ها را مساعد

ساخته و قابلیت مقایسه میزان فقر را با تخمین های قبلی محدود میسازد. با آنهم، تحلیل و تجزیه شاخص های اجتماعی-اقتصادی که تعریف آنها با گذشت زمان ثابت باقی مانده است نظریات مفیدی را برای درک روند رفاه همگانی خانواده های افغان ارائه مینماید. ارقام داده شده بهبودی قابل ملاحظه را در شاخص های متعدد تعلیم و صحت نشان میدهد. براساس NRVA سال های ۱۳۸۴ و سالهای ۱۳۸۶ و ۱۳۸۷ میزان شمولیت در مکاتب ابتدایی برای اطفال (بین ۶ الی ۹ ساله) در سطح کشور ۴۰ فیصد افزایش یافته است. فیصدی جوانان با سواد (بین ۱۵ الی ۲۴ ساله) از ۳۱ فیصد به ۳۷،۶ فیصد افزایش یافته است. همچنان در طول این مدت کوتاه، میزان معافیت اطفال (۱۳ الی ۲۴ ماهه) در مقابل امراض مزمن بیش از سه برابر گردیده است.

بر مبنای ابتکار موفقانه برای جمع آوری ارقام NRVA ۱۳۸۶ و ۱۳۸۷ از تمام ولایات افغانستان در طول سال، این گزارش میتواند جزئیات زیادی را در مورد اینکه چگونه فقر بر زندگی مردم اثر گذار میباشد، ارائه نماید. هیچکدام اینکارها بدون سهمگیری فعال و رهبری اداره احصائیه مرکزی و وزارت احیاء و انکشاف دهات که در سخت ترین شرایط در جمع آوری ارقام پرداختند، امکان پذیر نمی بود. تهیه این گزارش و ارقام تخمینی در مورد فقر بیشتر وابسته به رهبری وزارت اقتصاد و کمیته تخنیک بی بین الوزارتی ارقام تخمینی فقر (PETC) میباشد. همچنان مساعدت مالی و تخنیک مراجع تمویل کننده، منجمله اتحادیه اروپا، برنامه غذایی جهان، اداره انکشاف بین المللی کشور شاهی انگلستان، بانک انکشاف آسیایی و بانک جهانی نیز در تهیه این گزارش نقش مهم داشته اند.

این گزارش با تحت پوشش قرار دادن ابعاد غیر مالی فقر، خاصاً وضعیت تعلیم و صحت، و آسیب پذیری در برابر حوادث، خصوصیت چند بُعدی فقر را توضیح مینماید. جدول های موجود درین گزارش با تفکیک منطقه، منابع عایداتی، جندر، و سایر خصوصیات اجتماعی-اقتصادی تهیه گردیده است. علاوه بر پیشکش نمودن یک تصویر کلی از ابعاد متعدد فقر، مهم است بدانیم که این گزارش اولین تخمین رفاه ملی با در نظر داشت تغییرات اقلیمی در سراسر افغانستان میباشد. ازینکه در گذشته اینگونه ارقام تخمینی وجود نداشته، فراهم آوری ارقام تخمینی درین گزارش یک تحلیل جدید بوده که خلاء های موجود در آگاهی ما را در مورد وضعیت فقر در افغانستان مرفوع مینماید.

## EXECUTIVE SUMMARY

Poverty reduction is one of the three key objectives of the Afghanistan National Development Strategy. The poverty profile is an important element in the information kit of the policymaker that helps focus policy to attain this objective. A poverty profile is standard methodology to describe the extent and nature of poverty in a country or region. It assesses the magnitude of poverty and its distribution across geographic and socioeconomic domains, provides information on the characteristics of the poor, illustrates the heterogeneity among the poor, and identifies correlates of poverty.

A recent Oxfam report (2009), widely reported by major news providers such as British Broadcasting Corporation (BBC) and Reuters, suggests that the majority of Afghans view poverty and not the Taliban as the main reason behind the ongoing conflict. But up to now, the picture of poverty in Afghanistan has been very incomplete. Our understanding of poverty in Afghanistan had been curtailed by a lack of representative household data.

The newly released 2007/08 NRVA resolves this data shortage and indicates that the national poverty rate for Afghanistan is 36 percent, meaning that approximately 9 million Afghans are not able to meet their basic needs. On average, the poor are only able to consume at a level equal to 78 percent of the estimated cost of basic needs. While 36 percent of the population cannot meet basic consumption needs, there are many more people who are highly susceptible to becoming poor. More than half of the population is consuming at a level of less than 120 percent of the poverty line. One small, negative shock has the potential to move many individuals into poverty.

This report classifies provinces into five categories ranging from low-poverty provinces, where less than 20 percent of the population is poor, to high-poverty provinces, with poverty rates greater than 57 percent. The low-poverty provinces are spread throughout all regions of the country, including for example, Helmand in the Southwest, Farah in the West, Jawzjan in the North, and Baghlan in the Northeast. The high-poverty provinces are somewhat more clustered, and include for example, the contiguous provinces of Paktika, Paktya, Logar and Wardak in the South and Central region; as well as Kunarha and Laghman, two bordering provinces in the East.

Regional and seasonal differences are important aspects of poverty in Afghanistan. Temperatures vary dramatically across seasons, with hot summers and frigid winters; and similarly there are stark differences in elevation and terrain across regions. Both elements are correlated with poverty outcomes, and in some cases, they interact in ways that directly affect wellbeing. For example, severe winter condition affects transportation, and in high mountainous areas, like in Bamyán, Daikundi or Badakhshan, roads are often blocked throughout the winter due to heavy snow accumulation. In these communities in particular, they are forced to rely only on food supply that households store before the winter. Not surprisingly, these three provinces all have poverty rates that are much higher than the national average.

Because the NRVA 2007/08 was in the field during an entire year, it is the survey in Afghanistan that can provide information about how wellbeing changes during the seasons, and how people cope during harsh times. In the summer of 2007, the poverty rate was estimated at 21 percent. This rate is much lower than the annual estimate of 36 percent because it reflects wellbeing right after the major fall harvest. As Afghanistan entered the winter season, the poverty rate rose to 32 percent in the 2<sup>nd</sup> quarter. Forty percent of Afghan households do not receive any revenue from their principal income source during winter months. As expected, rural households are the most exposed to seasonality, receiving the bulk of their incomes from agricultural activities and not able to maintain their main livelihood source for half of the year.

The effect of seasonality though is entangled with the food price crisis, which hit during the 3<sup>rd</sup> and 4<sup>th</sup> quarters of the NRVA. Both effects produced significant declines in wellbeing with real expenditures on food declining by more than one third, and the poverty rate more than doubling over the course of the year. Future analysis will explore how the people of Afghanistan coped with these large changes, and this information can help inform potential policy responses to future adverse, price shocks.

The importance of agriculture in Afghanistan's economy remains critical. The NRVA 2007/08 data show that 36 percent of households rely on farming as their main source of income while another 6 percent depend on farm wages as their main source of income. While the economic dependence on agriculture directly correlates with the low level of urbanization, it is noteworthy that more than half of the households reporting farming as their main source of income are subsistence farmers.

In Afghanistan, as in most developing countries, labor endowment is one of the most critical assets for households. According to NRVA data, 67 percent of individuals in the working age population (aged 16 and above) participate in the labor market, 62 percent of working-age individuals are engaged in some form of employment during the preceding month, whereas 7.9 percent of the labor force can be broadly considered as unemployed. This relatively low level of open unemployment is counterbalanced by the severity of underemployment, especially in rural areas. More than 48 percent of employed individuals work an average of less than 35 hours per week, which we refer to as "underemployed". Underemployment is particularly severe in rural areas where it affects 53 percent of the workers. Poorer households (lower quintiles of total expenditure) have – on average – both a higher number of members participating in the labor market and a higher number of underemployed. For individuals living in poorer households being engaged in some form of income generating activity, irrespective of its quality, is a necessity to make ends meet rather than a choice.

Child labor in Afghanistan mainly affects boys and it is higher in rural labor markets. Out of nearly 8 million Afghan children between the ages of 6 and 15 years, 18 percent are engaged in some form of economic activity (working either for pay, in family business, handicrafts, assisting with agriculture or livestock, or collecting in the street). Male child labor is almost twice that of

females', and child labor is almost three times higher in rural than urban areas. In rural areas, there does not appear to be any correlation between poverty status and the likelihood of a household with children laborers. In urban areas there is a slight correlation, with poorer households having a somewhat higher rate of child labor.

Patterns of exclusion and vulnerability in Afghanistan have a strong gender dimension. While a better understanding of gender issues will require more analysis of the data, descriptive statistics show that women have limited access and command over productive resources. First and foremost, women in Afghanistan have little access to education. The literacy rate for women aged 15 to 24 is 22 percent, compared to 51 percent for men. Similarly, enrollment rates for girls aged 6 to 9 is 28 percent lower than for males (31 compared to 43 percent). A key finding, in terms of reducing these gaps, is that improvement over time in educational outcomes has been less strong for women than for men. This trend suggests that gender gaps could widen without more focus on gender. A lack of schooling, coupled with cultural barriers, means that women are ill equipped to participate in the labor market and have few economic opportunities. Labor force participation of women is almost half that of men (46 against 86 percent of men), and the gap is even more striking in urban areas where only 19 percent of women actively participate in the labor market.

In terms of whether services are reaching the poor in general, the education and health sectors serve as an interesting contrast. In the case of education, overall primary school enrollment is still low at 37 percent (children ages 6-9). But, enrollment rates for both boys and girls in the bottom 20<sup>th</sup> percentile of consumption distribution (the poorest) actually have enrollment rates that are the same as boys and girls in the second richest quintile (60<sup>th</sup> – 80<sup>th</sup> percentile of the consumption distribution). The examination of the interaction between school attendance and child labor suggests that the low rates of enrollment are not that well explained by the need to work. Forty-two percent of children aged 6-15 are neither engaged in economic activities nor studying.

In contrast to school enrollment rates, when considering access to health care, there are stark poor-nonpoor differences. In particular, given that Afghanistan has one of the highest infant mortality rates in the world, access to prenatal healthcare and skilled care at birth are two useful measures of the health program. In both cases though, the poor fair much worse than the relatively better off. Only 24 percent of the poorest (bottom 20 percent) mothers receive antenatal care, for the 60<sup>th</sup> – 80<sup>th</sup> percentile this figure almost doubles (42 percent). Similarly, only 10 percent of the poorest mothers have skilled-birth attendance during birth; this figure triples (31 percent) for the 60<sup>th</sup> – 80<sup>th</sup> percentile.

In recognizing the importance of disability policy, and to address the rights and needs of persons with disabilities, the Afghan government drafted the National Disability Action Plan 2008-2011 (ANDAP). With the low rates of access to health care, and decades of conflict, the NRVA data indicates a surprising relatively low rate of disability in the country. 5.2 percent of Afghans

reported experiencing mild disability which amounts to 1.3 million Afghans, and 1.6 percent of Afghans reported severe disability which is 400 thousand individuals. In addition to individual disability rates, we estimate a household-level disability rate, which is based on whether the household has at least one member with a disability. Household-level disability prevalence rate is an important measure to consider since disabled member can add economic and psychological stress to the household through high health care cost requiring economic support from other household members. More than a quarter of households (28.4 percent) have at least one mildly disabled household member, and 10 percent of households have at least one severely disabled household member.

With high infant mortality, and high levels of malnutrition (as evidenced by one of the highest levels of stunting in the world), access to safe drinking water is critical to the health status of individuals. One of the main causes of child malnutrition and mortality in the world is diarrhea, and many such deaths are preventable by improving access to safe water and sanitation. In the case of rural areas of Afghanistan, less than 20 percent of the population has access to safe water (i.e. hand pump, bored well, protected spring, and pipe water). In rural areas, access to safe water is very low for both the poor and nonpoor (ranging from 18 to 21 percent). This would suggest that access in rural areas is primarily a supply side issue. In contrast in urban areas, an estimated 39 percent of the poor (bottom 20 percent) has access to safe water, and this increases for each quintile, reaching a maximum level of 66 percent for the top quintile in urban areas.

The NRVA instrument has evolved over the previous years in ways that affect comparability of many outcomes over time. In particular, the NRVA 2007/08 instrument has an expanded consumption module that allows for a more complete measure of total consumption, but also severely restricts any ability to compare the current poverty rate with previous estimates. Nonetheless, the analysis of socioeconomic indicators whose definition has remained stable over time provides very useful insights into understanding the trends in well being of Afghan households. The data show a significant improvement in several education and health indicators over time. Enrollment rates for primary school children (aged 6 to 9) have increased nationwide by about 40 percent (10 percentage-point increase) between 2005 and 2007/08. The percentage of the young adult population (aged 15 to 24 years) who are literate increased from 31 to 37.6 percent. Similarly, full immunization rates of children (13-24 months) have more than tripled over this short time period.

Due to the successful initiative to collect the NRVA 2007/08 data in all provinces of Afghanistan, throughout the calendar year, this report is able to provide many details on how poverty affects the population. None of this would have been possible without the active engagement and leadership of the Central Statistics Organization and the Ministry of Rural Rehabilitation and Development in collecting the data under extremely difficult circumstances. The development of this report and the poverty estimates relied heavily on the leadership of the Ministry of Economy and the inter-Ministry Poverty Estimates Technical Committee (PETC). Finally, also key to this report was the financial and technical support from donors, including the

European Union, World Food Programme, UK Department for International Development, Asian Development Bank, and the World Bank.

The report describes the multidimensional nature of poverty by encompassing the nonmonetary dimensions of poverty, particularly education and health status, and vulnerability to shocks. Tables in the report are also disaggregated by region, income sources, gender, and many socio-economic characteristics. In addition to providing a picture of the many dimensions of poverty, it is important to also recognize that the poverty estimates in this report are the first nationally representative, seasonally smoothed estimates of wellbeing for Afghanistan. Because previously no such existing estimates were available, the provision of these estimates in this report is new analysis that substantially fills key knowledge gaps in our understanding of the poverty situation in Afghanistan.

## I. INTRODUCTION

Poverty reduction is one of the three key objectives of the Afghanistan National Development Strategy. The poverty profile is an important element in the information kit of the policymaker that helps focus policy to attain this objective. A poverty profile is standard methodology to describe the extent and nature of poverty in a country or region. It assesses the magnitude of poverty and its distribution across geographic and socioeconomic domains, provides information on the characteristics of the poor, illustrates the heterogeneity among the poor, and identifies correlates of poverty.

Household surveys are an indispensable tool for studying distributional and poverty issues. In line with the recommendations of the ISN to improve the knowledge base for monitoring poverty and other social outcomes, the World Bank has provided technical support in the collection and initial analysis of the National Risk and Vulnerability Assessment (NRVA) 2007/08. The NRVA is a multi-topic, nationally representative household survey that collects information on household composition, income, housing characteristics, access to facilities, education, health status, remittances, and several other types of socio-economic data. Thanks to the dedication of staff from Government of Afghanistan (GoA) Central Statistics Organization (CSO) and Ministry of Rural Rehabilitation and Development (MRRD), who worked under extremely difficult security situations; and thanks also to funding from the European Union, World Food Programme, UK Department for International Development, Asian Development Bank, and the World Bank, we now have what appears to be a very solid statistical base to measure poverty. As the primary data source for this report on poverty, the NRVA 2007/08 has the potential to substantially improve on past efforts.

It is unusual to have household survey data from a fragile state. It is remarkable that the NRVA team succeeded in collecting data in all 34 provinces during a time of conflict and insecurity, with high response rates, and seemingly high quality responses. The NRVA 2007/08 will be able to provide the first nationally representative, seasonally smoothed estimates of wellbeing for Afghanistan. Because there are no such existing estimates available, the provision of these estimates will be new analysis that substantially fills key knowledge gaps in our understanding of the poverty situation in Afghanistan.

This document is organized as follows. The first section describes the primary source of data used throughout the report, explains the methodology used for poverty estimation and reviews the process and the key institutions involved in producing the official poverty figures. The second section presents the national poverty estimates and profiles the geographic distribution of poverty. The following sections take into account the multidimensional nature of poverty by encompassing the nonmonetary dimensions of poverty, particularly education and health status,

and vulnerability to shocks. The tables are also disaggregated by region, income sources, gender, and many socio-economic characteristics.

## **MEASURING POVERTY USING THE NRVA 2007/08**

The NRVA 2007/08 is a comprehensive multi-topic household survey that spans topics such as food consumption, demography, housing infrastructure, assets and credit, agriculture and livestock, migration, and child and maternal health. The 2007/08 survey collects data on a sample of 20,576 households in 2,572 communities. The salient feature of this data is its coverage; the data were collected from all 34 provinces of Afghanistan over an entire year. The data is representative at the analytical domain level (or, the stratum). Altogether, there are 46 domains, comprising 34 domains for each 34 provinces of rural or small urban populations, 11 urban domains from 11 provinces with the highest urban populations, and one domain for Kuchi populations. The sampling was designed to get province-level figures for most of the key indicators. The fielding of the NRVA 2007/08 survey spanned the 12 month period from Sunbula 1386 to Asad 1387<sup>1</sup> to capture seasonality of poverty.

**The effective sample size for poverty analysis corresponds to 20,543 households.** Despite the large scale of the survey, the quality of data is very good and only 0.2 percent of the observations had to be dropped due to incompleteness of data. In particular, thirty-two households are dropped from the analysis because all information from the Female Household Questionnaire is missing from four communities.<sup>2</sup> One additional household is dropped because there is no household roster (which is needed to estimate household size for per capita consumption).

**The Population.** The sampled households were selected from the national household listing for the planned Census which was undertaken from 2003 to 2005 by the Central Statistics Organization (CSO). Households were selected from the household listing following a stratified, two-stage design. All point estimates (e.g. means, frequencies) have been weighted to correct for the unequal probability of selection, which means that they describe population characteristics. All standard errors and confidence intervals have been corrected for stratification and clustering.

**The 2007/08 NRVA provides the first seasonally smoothed poverty estimates for Afghanistan.** Previous analyses of poverty in Afghanistan have been curtailed by a lack of representative household data spanning all seasons of the year. The NRVA 2005 data were collected only during the summer, a time of relative plenty in much of Afghanistan. Due to the timing of the survey, there was a concern that the estimated 33 percent poverty prevalence underestimated poverty. To address this concern, a small-sample survey was conducted in the

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<sup>1</sup> September 2007 through August 2008.

<sup>2</sup> The four communities are: Day Chopan in Zabul, Achamgari in Nooristan, and Islamabad and Gaman Dok both in Laghman Province. Despite the missing female household questionnaires, the female community questionnaire was completed in these villages.

lean, spring season of 2007, and indeed the estimated poverty rate was higher at 42 percent. However, the focus on a single season and the limited coverage of these two surveys has been a shortcoming in previous poverty analysis.

**Fieldwork.** The design of the NRVA 2007/08 directly addresses the issue of seasonality by collecting data during an entire year, from September 2007 through August 2008. Additionally, the households were selected in such a way to ensure that each quarter of data reflects the overall composition of the country. This feature of the design directly addresses the concern that in order to understand poverty in Afghanistan, it's necessary to have seasonally-adjusted estimates. The longer fieldwork of the NRVA 2007/08 also had the distinct benefit of reducing the size of the survey team, thereby allowing for quality control and careful selection and training of the interviewers. Moreover, the survey design also exploited the year-long field work to improve coverage of insecure areas. The basic idea is that some areas were insecure during some times of the year, but not necessarily throughout the entire duration of the 12 months of field work. When a PSU was deemed to be too insecure to interview during the scheduled time, it would not be immediately replaced, but would be re-considered for a later date.<sup>3</sup>

**Survey instruments for the NRVA 2007/08 were improved from previous rounds.** As a result of consultations involving NRVA stakeholders in Afghanistan, the NRVA 2007/08 questionnaires evolved from the 2005 questionnaires. Questions were added and dropped by consensus from users in respective fields, and the instruments were reviewed to cover more areas of the Afghan Compact (IDP, disability, etc.). Directly related to poverty estimation, additional questions were added to better capture consumption of both non-food and food items. Also, previous poverty estimates for Afghanistan did not include estimates of the use-value of durable goods, nor of the imputed rental value of housing. The estimates that are provided in this report include the value of these consumption items. The consumption value of durable goods and housing are important determinants of wellbeing, and the inclusion of these items helps produce a more complete picture of economic wellbeing.

For non-food items, the revision followed the guidelines from the National Accounts office of the Central Statistical Organization. As a result, the number of items surveyed was expanded from 13 in 2005 to 41 in 2007/08 to include both disaggregated items as well as completely new ones. For food consumption, 27 more food items were added to accommodate the yearly coverage of NRVA 2007/08 and to include seasonal food items.

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<sup>3</sup> The scheduled re-visit date would typically fall within the quarter, ensuring that not all revisited PSUs occurred at the end of the field work. Of the 2,441 non-Kuchi PSUs in the sample design, only 68 were replacement PSUs (less than 3 percent replacement). The majority of these replacements were due to reasons of insecurity. Replacement PSUs were almost always PSUs in the nearest secure district.

## MEASURING WELLBEING: PER CAPITA HOUSEHOLD CONSUMPTION

**Consumption is the measure of wellbeing.** Assessing poverty requires both the definition of some welfare measure and the definition of a threshold – the “poverty line” – representing the minimum level of welfare below which a person is deemed to be poor. The measure of welfare used in this analysis is per-capita household consumption. Consumption is preferred to income for a few reasons. First, consumption is considered a better indicator of living standards because it typically fluctuates less than income over a month or year. Second, in a rural and subsistence economy – such as the Afghan one – consumption tends to be more accurately measured than income.<sup>4</sup> Third, the design of the National Risk and Vulnerability Assessment (NRVA) 2007/08 is such that the instrument collected extensive information on consumption. It should be pointed out that consumption-based poverty is a measure of *economic* welfare. While other dimensions of welfare (e.g. education, health, etc.) are not directly taken into account in this definition of poverty, research has shown that consumption tracks other dimensions of welfare fairly closely.

**Consumption is estimated following international guidelines.** The consumption aggregate has been constructed following the recommendations described in Deaton and Zaidi (2002). This methodology is consistent with the one used to measure poverty incidence from NRVA 2005. The greater detail and quality of information available in the NRVA 2007/08 – the survey covers all seasons and the consumption module includes assessment of more food and non food items - allows for more comprehensive measure of poverty, but the changes in the instrument also limit the comparability of poverty figures over time.

The per capita consumption aggregate is obtained by adding the value of goods and services consumed by households and dividing it by the number of family members. The goods services include expenditures on food and nonfood items, as well as estimated values of the use-value of durable goods and housing. These expenditures are converted into Afghani terms, expressed as monthly amounts.

**Food consumption is a core component of the consumption aggregate.** The estimated value of total food consumption was calculated by multiplying food quantity and food price data from the NRVA 2007/8. Food quantity data are from the food consumption module (Section 15) of the Female Questionnaire; which contains data on the quantity of each food item the household consumed in the past 7 days. Food price data were drawn from the District Price Survey data (DPS). In order to make the consumption aggregate complete, all food items are included in the estimate, including items classified as “other” and the “food away from home” category. It should be noted that food consumption data used in this analysis includes food that may have been acquired from all sources including non-monetary transactions such as gifts, food aid, or home production.

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<sup>4</sup> Household income in such economies tends to come from informal and non-monetary sources, making it challenging to capture in a household survey.

**Food consumption choices follow a typical pattern.** One check on data quality is to assess whether consumption follows expected patterns. Table 1 shows consumption of food types by quintiles, revealing that for the poorest, consumption of breads and cereals comprises 56 percent of their total food consumption. This drops to 33 percent for the richest households. As expected, consumption of meat follows the opposite pattern. In particular, while meat for the poor comprises only 6 percent of total food consumption, this figure triples for the rich, for whom meat consumption comprises 18 percent of the total value of their food consumption.

**Table 1: Value of food consumption (%) by quintile (per capita total consumption)**

PCE quintile	Poorest	2	3	4	richest	Total
<b>Bread and cereals</b>	56	52	47	42	33	<b>43</b>
<b>Meat and fish</b>	6	9	12	15	18	<b>14</b>
<b>Dairy products</b>	10	10	10	10	9	<b>10</b>
<b>Oils/ fat</b>	9	8	8	7	6	<b>7</b>
<b>Vegetables</b>	8	8	8	9	9	<b>9</b>
<b>Fruit</b>	2	3	5	8	13	<b>8</b>
<b>Sugar and candy</b>	3	4	4	4	3	<b>4</b>
<b>Beverages</b>	3	3	3	3	3	<b>3</b>
<b>Spices</b>	1	1	2	1	2	<b>2</b>
<b>Food away from home</b>	1	1	2	2	4	<b>2</b>
<b>"Other" food items</b>	0.4	0.2	0.3	0.5	0.7	<b>0.5</b>
<b>Total food</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: 2007/08 NRVA

**Non-food consumption covers multiple items.** The value of non-food consumption was estimated by aggregating expenditures on non-food goods and services collected in various sections of the NRVA. Energy expenditures were obtained from Section 2 (Housing and utilities) while other items were from section 12 (Household Expenditures)<sup>5</sup> and from Section 16 (answered by female respondents). Expenditures such as medical expenses, education, transportation, and clothing were reported on an annual basis, and converted into monthly values. Energy expenditures cover all sources: electricity, gas, oil, firewood, charcoal, coal, straw, ping, and manure.

**Non food consumption includes the use value of durable goods.** The previous NRVA instruments had not collected sufficient information to estimate the use- (or rental-) value of durable goods. The 2007/08 instrument was enhanced to allow this addition to the definition of total household consumption. The Male Household Questionnaire contains a detailed inventory

<sup>5</sup> Both questions on energy and household expenditures are administered in the Male Household Questionnaire.

of 18 different types of durable goods. Data in this section include items such as refrigerator, stove/ gas balloon, sewing machine, iron, radio/tape recorder, TV, VCR/DVD player, satellite phone, bicycle, motorcycle, car, tractor, thresher, mobile phones, carpets (*khalin*), *gilim*, blankets, and kitchen utensils. The use-value of these goods is thought of as comprising two components: (i) the opportunity cost of funds tied up in the durable good; and (ii) time depreciation of the good itself. Given that households, generally, cannot report such values; use values of durable goods are typically estimated from the data on the stock and characteristics of durables, rather than on related expenditures. Based on these assumptions and data, the average household had a use-value of durable goods of 439 Afs per month, which accounted for 2.5 percent of total household expenditures.

**The rental value of housing is also included.** Housing is an important part of household expenditures, especially in urban areas. Ideally, housing expenditure should be included to capture the service that households enjoy from their dwelling. The revision and improvement of 2007/8 NRVA survey instruments led to the addition of several new questions meant to directly capture the value of the dwelling thus allowing for an estimated rental value of all housing. As a result of survey improvements, 7,819 out of 20,576 households in the sample reported valid housing values, which accounts for about 48 percent of urban households and 38 percent of rural households.<sup>6</sup> In order to obtain a measure of the rental values of housing, a model is estimated that fits housing values (for those reporting a value) as a function of housing characteristics.

**Total - per capita – household’s consumption.** The sum of food consumption, non-food consumption, use value of durable goods and rental value of housing gives a measure of total household consumption (consumption aggregate). Dividing the consumption aggregate by the household size leads to per capita household consumption, which is the basis for estimating wellbeing and poverty.

**Table 2: Consumption share (%) by quintiles**

Quintile	Food	Non-food	Durables	Rent
1st (poorest)	66	25	2	7
2	64	27	2	7
3	61	30	3	7
4	57	31	3	9
5th (richest)	49	33	4	13
All	59	29	3	8

Source: 2007/08 NRVA

<sup>6</sup> Moreover, all 961 households that paid rent also reported self-evaluated dwelling values; this subsample was used to validate the estimated rental values.

Table 2 shows the share of total consumption for each of these components by consumption quintiles. For example, food consumption makes up 66 percent of total consumption for the poorest quintile. As expected, the food share declines as wellbeing increases, falling to less than 50 percent for the richest quintile. The opposite holds for the share of rent and durables to total consumption, which are increasing in income.

**The poverty threshold is based on the estimated cost of basic needs.** The consumption aggregate is the basis of measuring wellbeing, and the poverty line is the benchmark for assessing whether a household has attained a minimum level of wellbeing. If the per capita level of household consumption is less than the poverty line, then all members of that household are considered poor. The poverty line used in this analysis has been estimated using the Cost of Basic Needs (CBN) method.<sup>7</sup> The CBN poverty line represents the level of per capita consumption at which the members of a household can be expected to meet their basic needs (food consumption to meet their caloric requirement, and also non-food consumption). The poverty line consists of two components – the food poverty line and a supplement to the food poverty line to account for basic non-food needs.

**Caloric intake is based on NRVA 2007/08 quantity estimates.** The food poverty line is anchored to a minimum caloric requirement and therefore estimating total caloric intake is an important building block for the estimation of the poverty line. From the NRVA 2007/8, the estimated median per capita consumption level is 2,477 kilocalories per day. Estimating caloric intake is straightforward and consistent with the method used for the NRVA 2005. Food consumption of households was converted to kilocalories by the same caloric conversion table used in 2005. Food items, for which consumption was recorded in number of pieces such as eggs and bread, were similarly converted to weight measurement with same conversion scale.<sup>8</sup> The conversion table was enhanced to accommodate the expanded food questionnaire of the NRVA 2007/8 where many more food items had been added.<sup>9</sup>

**The bundle of minimum food needs is based on typical consumption patterns of the “relatively poor”.** The relatively poor are defined for each region as those individuals whose consumption level is in the 20<sup>th</sup> to 50<sup>th</sup> percentile of real, per capita consumption in each region. The regional subsamples are aggregated together into one sample of the relatively poor. The consumption pattern of this sample then defines the typical food bundle of the relatively poor. The inclusion of households from each region in the construction of the reference food bundle ensures that the bundle reflects the regional diversity in consumption patterns. But, by aggregating all together into one bundle, it is ensured that minimum food quantities and types are the same for everyone in the country. In this way, the food bundle reflects regional variation, but

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<sup>7</sup> The CBN methodology is used internationally, see Ravallion (1998) for details.

<sup>8</sup> An egg is assigned weight of 50 grams and a piece of bread is assigned a standard weight of 200 grams. For details, see <http://www.fao.org/docrep/003/X6878E/X6878E00.htm>.

<sup>9</sup> It should be noted that food consumption items in the “other” categories were not included in the caloric intake calculation.

also anchors the definition of minimum needs to be the same for everyone. If the reference bundle varied across regions, it would be more difficult to assert that the utility derived from the bundle is constant. For example, if there were two reference bundles, and one had more meat than the other one, it would be reasonable to think that the more meat intensive bundle reflected a higher quality or higher utility level.

**The cost of the food bundle is anchored to minimum caloric needs.** This reference bundle, consisting of the average amounts consumed of each item by the subsample, contains 2,441 calories. We then estimate the cost of obtaining 2,100 calories (the benchmark determined to be the per capita minimum caloric requirement to meet basic needs) if those calories were obtained following the same consumption patterns as found in the reference food bundle. This essentially means scaling down the cost of the reference food bundle by a factor of  $2,100/2,441$ . The estimated cost of this scaled food bundle is 690 Afghani per capita, per month when priced in terms of quarter 1, region 1 (Central, urban) prices. In real terms, the cost of the food poverty line is the same for everyone. In nominal terms, it differs across regions and over quarters.<sup>10</sup>

**The nonfood poverty lines are region specific.** The 2007/8 consumption aggregate contains much more information about non-food consumption relative to the 2005 aggregate. In particular, the 2007/8 aggregate contains the estimated rent-value of housing and the estimated use-value of durable goods. Neither of these items was in the 2005 measure of wellbeing, but both are important factors in determining overall wellbeing and in helping to distinguish the poor from the nonpoor. The challenge though in including these additional aspects of wellbeing is that the costs and needs of these items (in particular housing) differ significantly across regions, and in particular across urban and rural areas. For example, on average the estimated rental value of housing is equal to 6 percent of total consumption in rural areas; but is 19 percent on average in urban areas. To account for the large differences in the costs and presumably needs of non-food consumption across regions, we estimate region-specific non-food allowances to supplement the food poverty line.

**Nonfood allowance is based on median expenditures of the food poor.** The non-food allowance is based on the typical nonfood expenditures of a subsample of households in each region whose per capita food expenditure is relatively close to the food poverty line. When selecting this subsample, there were two criteria – one was to have sufficient sample size to provide ample support for the estimated non-food allowance, and the other was to ensure that the subsample was balanced around the food poverty line with equal number of households with expenditures less than and greater than the food poverty line. We obtain balance in the subsample by selecting equal proportions of the sample distributions above and below the food

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<sup>10</sup> An alternate way to state this is the analysis accounts for spatial variation in prices (i.e. it accounts for the fact that it's more expensive to live in some parts of the country). Jolliffe (2006) provides an example of where accounting for area-differences in the cost of living results in a re-ranking of urban - rural poverty differences.

poverty line. We select 10 percent of the sample above, and 10 percent below.<sup>11</sup> The non-food allowance is then estimated as the median value of non-food expenditures for the subsample of households whose food expenditures are close in value to the food poverty line.

**Definition of poor and food poor.** The overall poverty line is the sum of the food poverty line and the non-food allowance. A household is defined as poor if the total value of per capita consumption is less than the poverty line. If a household is defined as poor, all individuals in that household are deemed to be poor. Similarly, we also consider the measure of food poverty. This is defined as a household whose per capita value of food consumption is less than the poverty line. This does not necessarily mean that the household is consuming an insufficient level of calories because they might be trading food quality for quantity. Food poverty is a case where a household is spending less on food than what is necessary to obtain 2,100 calories following the average consumption patterns of the relatively poor (20-50<sup>th</sup> percentile of the real per capita consumption).

#### **PROCESS OF THE PREPARATION OF POVERTY ESTIMATION**

**Role of the PETC.** Poverty estimates from NRVA 2007/08 was conducted through the Poverty Estimation Technical Committee (PETC). To ensure proper and timely consultation, and to build technical consensus on poverty estimates, the Director General of the General Directorate of Policy, Monitoring and Evaluation of the ANDS at the Ministry of Economy formed the PETC in June 2009. The main purpose of the PETC is to discuss and provide inputs for the preparation of the poverty analysis and build technical consensus on poverty estimates. It establishes a mechanism for Government and donor discussions about the poverty estimates. Members of the committee comprise technical representatives from the WB, EC, DFID, CSO, MRRD, SNC, MoF, and MOLSAMD. The estimates produced by the WB team, in coordination with GoA, and endorsed by the PETC, are reported below and in many ways represent the first output from the poverty assessment work.

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<sup>11</sup> For example, if a particular region has 500 households, we select 50 households with food expenditures just under the food poverty line, and 50 households with food expenditures just above the food poverty line. This approach is in contrast to sub-sampling based on those households whose food expenditures are +/- some percent in value of the food poverty line. The weaknesses of this approach are two-fold: the strategy does not ensure a fixed, minimum sample size, and the strategy will frequently result in an unbalanced sample with more households above the food poverty line than below it. The unbalanced nature of the subsample is due to the empirical regularity that the food poverty line typically lies to the left of the mass point of the distribution of food consumption. Or, in other words, the slope of the food consumption distribution tends to be positive where the food poverty line intersects (meaning more mass immediately to the right of the food poverty line).

## II. PHYSICAL AND POLITICAL GEOGRAPHY OF POVERTY

**Poverty in Afghanistan affects 36 percent of the population, while more than half of the nation is vulnerable to poverty.** The overall poverty head count rate for Afghanistan is estimated as 36 percent of the total population and indicates that some 9 million Afghans are not able to meet their basic needs (Table 3). While 36 percent of the population cannot meet basic consumption needs, there are many more people who are highly susceptible to becoming poor. Figure 1 (Pen's parade) illustrates this idea by revealing that the (inverse) cumulative density function of consumption is very flat around the poverty line. To read this figure, note that the solid horizontal line reflects the value of the poverty threshold. This is the amount of Afghans per person per day needed to meet minimum basic needs. This line intersects the density function at 36 percent, revealing that 36 percent of the population consumes at a level below the poverty threshold. The dashed line above the poverty threshold is set at a value 20 percent greater than the poverty line and intersects the density function at 53 percent. This indicates that more than half of the population is consuming at a level of less than 120 percent of the poverty line. One small, negative shock has the potential to move many individuals into poverty.

**Table 3: Poverty in Afghanistan, 2007-08**

Poverty Indicators	Estimate	Std. Err.	[95 percent C. I.]	
Poverty Headcount rate	36	0.58	34.85	37.11
Poverty Gap	7.9	0.18	7.58	8.28
Poverty Gap Squared	2.6	0.08	2.44	2.75

*Note:* Individual-level weights used, standard errors corrected for complex sample design.<sup>12</sup> This note repeats for all tables, unless otherwise stated.

*Source:* 2007/08 NRVA

<sup>12</sup> Howes and Lanjouw (1998) present evidence that estimated standard errors for poverty indices can have large biases when false assumptions are made on the nature of the sample design. An example from Jolliffe, Datt and Sharma (2004) shows that in the case of poverty indices for Egypt, failing to adjust for the characteristics of the sample design would result in an underestimate of the correct standard errors by 187 to 212 percent.

Figure 1: Pen's parade

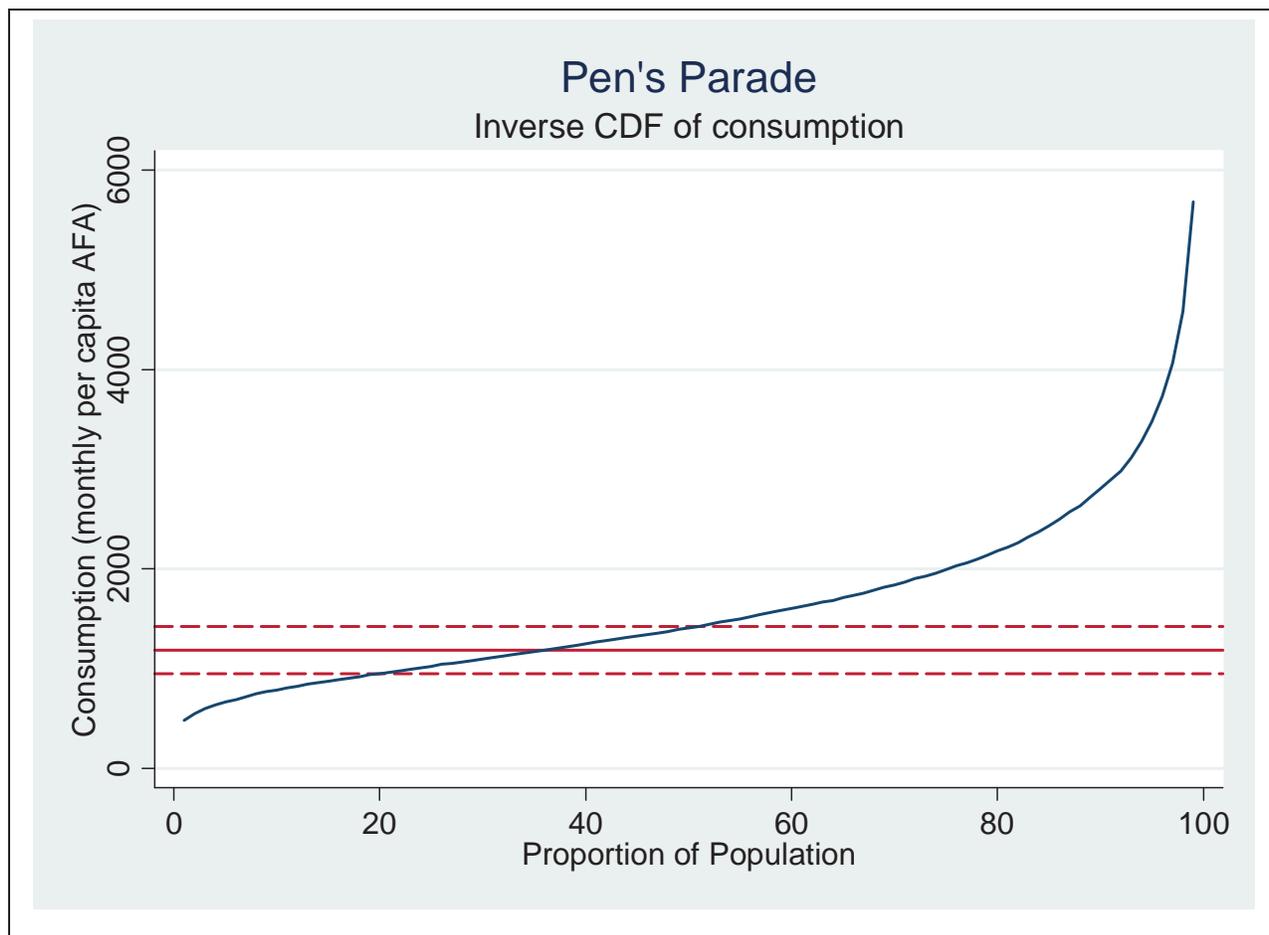


Table 3 also reports two other measures of poverty – the poverty gap and squared poverty gap. The poverty-gap index, ( $P_1$ ), is a measure of the depth of poverty and is defined by the average distance below the poverty line (expressed as a proportion of the poverty line), where the mean is formed over the entire population and counts the nonpoor as having zero poverty gap. The squared poverty-gap index, ( $P_2$ ), is a measure of the severity of poverty and is defined as the mean of the squared proportionate poverty gaps. These measures can be expressed as:

$$P_\alpha = 1/n \sum_i I(y_i < z) [(z - y_i)/z]^\alpha \quad (1)$$

where  $n$  is the sample size,  $i$  subscripts the individual,  $y$  is per the relevant measure of welfare (i.e. per capita consumption),  $z$  is the poverty line, and  $I$  is an indicator function which takes the

value of one if the statement is true and zero otherwise. When  $\alpha=0$ , the resulting measure is the headcount index, or the percentage of the population that is poor. The poverty gap results when  $\alpha=1$ , and the squared poverty gap when  $\alpha=2$ .

**Poverty gap is distribution sensitive.** The usefulness of the poverty gap and the squared poverty gap can be illustrated by considering a small transfer of money from a rich person to a poor person (i.e. a transfer that is not large enough to push the poor person over the poverty line). This transfer has no effect on the headcount index, but the poor person is better off and this welfare improvement is reflected in a reduction of both the poverty-gap and squared poverty-gap indices. As another example, a transfer of income from a poor person to a poorer person will not alter either the headcount or the poverty-gap index, but it improves the distribution of income of the poor and this change is reflected by a reduction of the squared poverty-gap index.

**Interpretation of the poverty gap.** Another characteristic of the poverty gap index is that the ratio of the poverty gap to the headcount (7.9/36) indicates that on average the poor fall 22 percent short of the poverty threshold (i.e. on average, the poor only consume at a level equal to 78 percent of the cost of basic needs). The squared poverty gap is the average value of the squared difference between the poverty threshold and the actual consumption level of the poor. This measure is sensitive to the distribution of the poor and is considered to reflect the severity of poverty. As an example of this characteristic, note that a transfer of income from a poor person to a poorer person will not alter either the headcount index or the poverty-gap index, but it will decrease the squared poverty-gap index.<sup>13</sup>

**Poverty is higher in rural areas.** A breakdown of the poverty incidence shows large differences by residence (Table 4). National level poverty estimates are mainly driven by people living in rural areas, who represent 80 percent of the Afghan population. As a result, while poverty in the rural population is close to the national average, the incidence in the urban population is relatively low (29 percent) and in the Kuchi population very high (54 percent). Similar patterns emerge from the disaggregated analysis of the poverty gap, which is the lowest in urban areas (6 percent) and the highest among the Kuchi population. However, closer analysis shows that urban poor are on average just as poor as the rural poor because the poverty gap is lower in urban areas, but in the same proportion to the headcount as in rural areas. In contrast, the poverty gap for the Kuchi is relatively higher at 14 percent, which indicates that the Kuchi not only suffer from a higher prevalence of poverty, but the Kuchi poor are on average poorer compared to other groups. A breakdown of the poverty incidence show large differences by residence.

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<sup>13</sup> For details on the poverty gap and squared poverty gap indices, see Foster, Greer and Thorbecke (1984). The squared poverty gap also has the useful characteristics that if poverty increases in any subgroup (e.g. urban areas), and it does not decrease elsewhere then aggregate poverty must also increase (Foster and Shorrocks, 1991). This is sometimes called "subgroup consistency", and is a characteristic not displayed by other popular distribution-sensitive poverty estimates such as Sen (1976) or Kakwani (1980).

**Poverty varies greatly by region.** With its diverse terrain, climate, and agricultural zone, poverty in Afghanistan varies dramatically across regions. Poverty rates at the region level are shown in Table 5 and. According to the NRVA 2007/08, poverty is lowest in the Central and South Western regions. The West Central region (or central highland), with its harsh climate and remoteness, shows the poverty level as high as 45 percent.<sup>14</sup> Figure 2 presents the regional variation in a map of Afghanistan, and also illustrates that there is significant variation in poverty rates across provinces.<sup>15</sup> Annex 1 labels each province as being in one of five poverty categories ranging from lowest (under 20%) to highest (poverty rates greater than 58%).

**Table 4: Poverty rate by residence**

	Poverty rate (%)	[95 percent C.I.]	
<b>Urban</b>	29	26.8	31.4
<b>Rural</b>	36	35.1	37.7
<b>Kuchi</b>	54	48.3	60.3

Source: 2007/08 NRVA

**Table 5: Poverty rate by region**

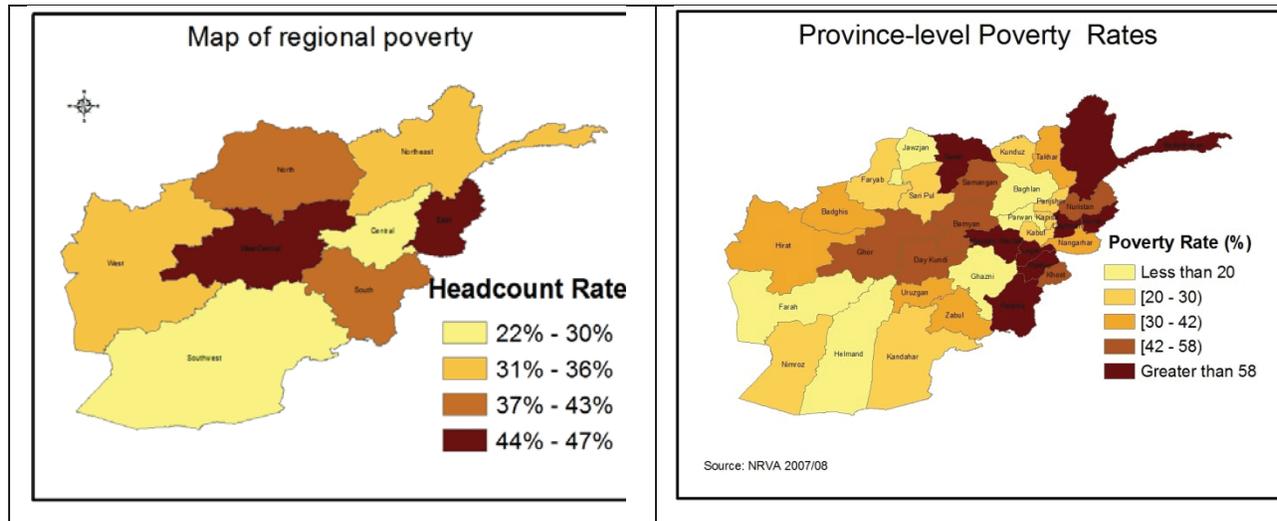
Region	Poverty rate (%)
Central	30.1
South	43.7
East	45.0
Northeast	36.8
North	39.5
West	35.4
Southwest	22.7
West Central	44.9
<b>National</b>	<b>36</b>

Source: 2007/08 NRVA

<sup>14</sup>Central: Kabul, Kapisa, Parwan, Wardak, Logar, Panjshir; South: Ghazni, Paktika, Paktya, Khost; East: Nangarhar, Kunarha, Laghman, Nuristan; Northeast, Badakhshan, Takhar, Baghlan, Kunduz; North: Samangan, Balkh, Jawzjan, Sar-I-Pul, Faryab; West: Badghis, Herat, Farah; Southwest: Nimroz, Helmand, Kandahar, Zabul, Uruzgan; West-Central: Ghor, Bamyán, Daikundi.

<sup>15</sup> One-way analysis of variance indicates that poverty rate differences across provinces explains about 14% of the total variation in poverty rates of the country.

**Figure 2: Poverty by region and province**

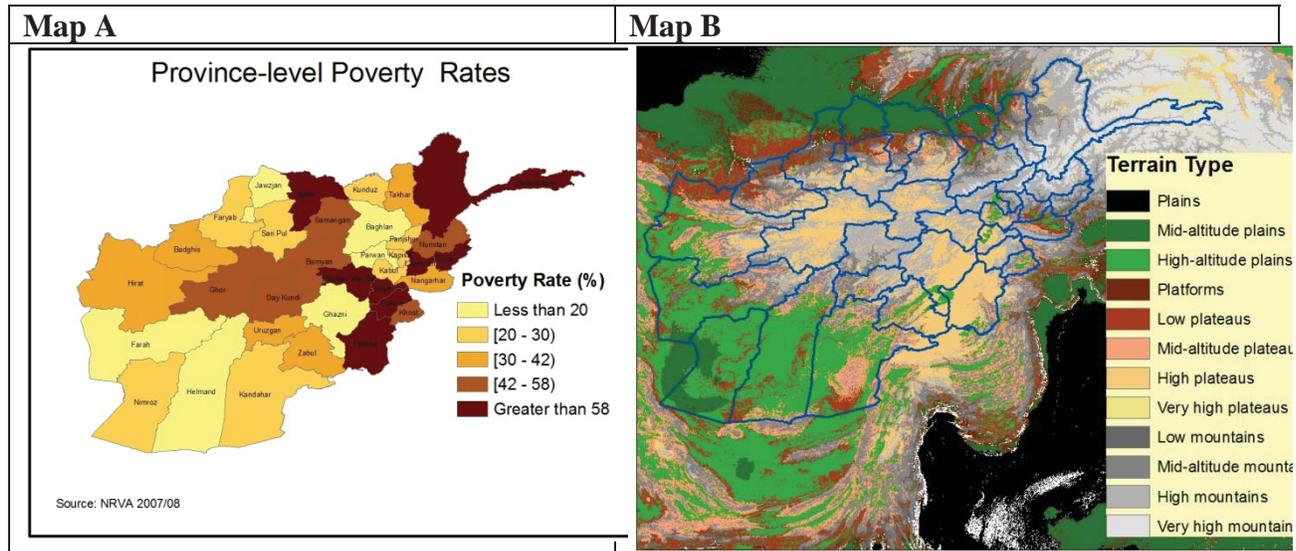


Source: 2007/08 NRVA

**Terrain characteristics are highly correlated with poverty.** With 80 percent of the population living in rural areas and mainly relying on agriculture for their livelihood, terrain characteristics can directly affect poverty and wellbeing. The terrain varies dramatically across regions of Afghanistan: from high mountain peaks in the Northeast and Central regions to plains and lowlands in the West and North and to desert in the Southwest. Figure 3 contrasts the provincial map of poverty with the map of terrain types. In this analysis, we classify land areas in Afghanistan into 12 terrain types, combining two dimensions of mountainous geography: relief roughness and altitude.<sup>16</sup> The relief roughness pattern ranges from plains to mountains are shown in Map B of Figure 3. Plains are the flattest type of land, followed by platforms and plateaus. Hills and mountains are at the other end of the spectrum where terrain is the most rough. In each type of relief roughness, areas can be further divided by their altitude. Map B shows that most of the Southwestern part of Afghanistan is composed of mid and high altitude plains, while high mountains are most present in Nuristan, Badakhshan and the central highland.

<sup>16</sup> Michel Meybeck, Pamela Green, and Charles Vörösmarty (2001) A New Typology for Mountains and Other Relief Classes: An Application to Global Continental Water Resources and Population Distribution *Mountain Research and Development* Vol 21 No 1 Feb 2001: 34–45

**Figure 3: Maps of poverty rate and terrain**



Source: NRVA 2007/08, Meybeck et al. (2001)

**Poverty tends to be higher in mountainous and plateaus areas.** Linking area specific terrain with the household data reveals an interesting poverty profile.<sup>17</sup> As presented in Table 6, the average poverty rate in the plains is only 28 percent and the lowest within Afghanistan. As expected, poverty is especially high at the “Very High” altitudes i.e. in areas where mean elevation exceeds 4,000 meters. However, elevation is not the only geographical factor affecting well being, In fact, while the relationship between elevation and poverty is not strictly linear, roughness of terrain seems to play a relatively stronger role. In order to explain this complex relation of poverty and geography, it may be useful to involve other geographical characteristics into the analysis such as crop pattern, transportation, road connections, and access to markets.

<sup>17</sup> It should be noted that terrain data is aggregated at the district level before merging to the NRVA household data for poverty analysis. At the district level, the majority of types by areas is used as the aggregation criterion.

**Table 6: Poverty rate by terrain types**

Relief roughness	Elevation				Total
	Low	Medium	High	Very High	
Plain		36	25		28
Plateau	35	36	46		41
Mountain	33	43	40	65	41
<b>Total</b>	<b>34</b>	<b>40</b>	<b>34</b>	<b>65</b>	<b>36</b>

Source: NRVA 2007/08

**Seasonality is a strong correlate of poverty in Afghanistan.** The NRVA 2007/08 is the first household survey in Afghanistan to collect poverty and wellbeing data throughout the year, enabling us to learn about seasonality and poverty in Afghanistan. The NRVA collected data during all seasons anticipating the existence of large seasonal differences in economic wellbeing mainly related to the agricultural cycle. Additionally, Afghanistan is particularly subject to extreme temperatures events with droughts and severe winter conditions affecting livelihoods of exposed communities. In many cases, severe winter conditions also affect transportation, with high mountainous areas, like Bamyán, Daikundi or Badakhshan, being often completely secluded during winter months, with roads blocked due to heavy snow accumulation. In these communities, survival during winter times depends on the food stocks that households were able to accumulate before the winter. The subsistence nature of production in the Afghan economy compounds the effects of extreme seasonality. Villages often have difficult connections to outside markets, and as a result, households in rural areas rely on the food supply that they have produced.

**Poverty by season.** As shown in Table 7, the poverty rate in the first quarter is at 23 percent, and it is the lowest poverty rate in the year. Poverty is highest in spring and summer of 2008, at around 44-46 percent (note that poverty rates in both quarters are statistically similar). The first quarter has such a low poverty rate in part because data is collected right after the major fall harvest. As Afghanistan entered the winter season, the poverty rate rose to 32 percent in the 2<sup>nd</sup> quarter. During the 3<sup>rd</sup> and 4<sup>th</sup> quarter, Afghanistan was hard hit by the global food price crisis, possibly resulting in even higher poverty rates. While understanding how the price crises affected poverty in Afghanistan will require further and detailed analysis, preliminary evidence seems to suggest that the crisis had a sizeable negative effect on households' wellbeing.<sup>18</sup>

<sup>18</sup> The increase in poverty in quarter 3 is consistent both with the seasonal effect, and with the increase in food prices. Both effects point toward an increase in poverty. In quarter 4, the continued high level of food prices would be expected to maintain a high poverty rate, but this is intermingled with the effect of seasonality which one would expect to bring poverty down in summer. Efforts to better understand the substantial changes in poverty rates will continue to be an area for further analysis.

**Table 7: Poverty rate, by season**

Quarter	Poverty rate
1 Fall-harvest 07	23.1
2 Winter 07/08	31.8
3 Spring 08	43.6
4 Summer 08	46.0
<b>Annual</b>	<b>36</b>

Source: 2007/08 NRVA

**The food-price crisis can be seen in the pattern of food consumption.** This quarterly pattern in poverty is also reflected in complementary measures of wellbeing more closely linked with food consumption. Table 8 above shows the seasonal pattern in a series of variables, namely: the calorie deficiency rate, the food poverty rate, the real food expenditure and the nominal food expenditure. First, it's worth noting that nominal food consumption stays largely unchanged throughout the year. The average monthly food expenditure, in nominal terms, is just under 1,200 AFA in each quarter. Once consumption is adjusted though for the change in food prices over the duration of the survey (accounting for the food price crisis, and also accounting for spatial differences in prices), the pattern is quite different. The real value of consumption is highest in quarter 1, after the fall harvest. With the advent of winter, real expenditures decline by about 20 percent; and then continue to decline as the food price crisis hit Afghanistan. Relative to the value of consumption in quarters 3 and 4, during the food-price crisis, quarter 1 consumption was approximately 50 percent higher.

**Table 8: Food consumption measures, by quarter**

Qtr	Season	Calorie deficiency rate <sup>(a)</sup> (%)	Food poverty rate <sup>(b)</sup> (%)	Food consumption (real terms)	Food consumption (nominal terms)
1	Fall	24	20	1,200	1,196
2	Winter	23	31	960	1,122
3	Spring	32	45	789	1,129
4	Summer	34	42	798	1,183

Note: (a) consumption below 2100 calories; (b) Food consumption below the food poverty line

Source: 2007/08 NRVA

**Evidence of a food quality for quantity trade off.** Concurrent to the decline in food consumption, the proportion of people consuming less food in value than that specified by the food poverty line more than doubles. This concept is sometimes referred to as food poverty rate. While this rate more than doubled, the proportion of people who were consuming less than 2100 kilocalories (calorie-deficiency rate) increased by about 42 percent. In quarter 1, 24 percent of the population consumed less than 2,100 kilocalories per day (which is the caloric benchmark for the food poverty line); in quarter 4, the calorie deficiency proportion increased to 34 percent.<sup>19</sup> The more rapid increase in the food poverty rate, relative to the calorie-deficiency rate, is consistent with the idea that people are trading off quality for quantity (i.e. sacrificing quality for calories as they reduce their food expenditures).

**Table 9: Food Consumption by quarter and area of residence**

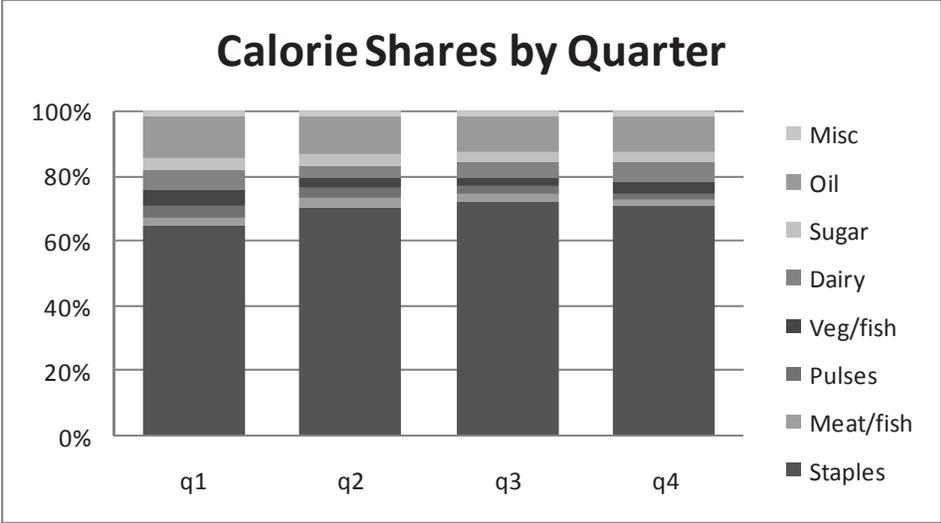
quarter	Monthly Per Capita Food Consumption (nominal)	Monthly Per Capita Food Consumption (real)	Daily per capita calorie intake less than 2100 calories	Food consumption below food poverty line
<b>Full sample</b>				
1	1196	1200	24%	20%
2	1122	960	23%	31%
3	1129	789	32%	45%
4	1183	798	34%	42%
<b>Rural and Kuchi</b>				
1	1162	1167	22%	21%
2	1063	918	24%	34%
3	1075	761	32%	48%
4	1123	755	35%	46%
<b>Urban</b>				
1	1331	1330	30%	18%
2	1359	1129	21%	18%
3	1350	905	30%	31%
4	1424	969	27%	25%

Source: 2007/08 NRVA

<sup>19</sup> The mean value of daily per capita calories also declines over the quarters, but to a lesser extent. In quarter 1, the mean is 2,883 calories and this declines by 17 percent to 2389 by quarter 4.

Figure 4 shows that the average composition of food consumed changed over the seasons. In Spring 2007 (quarter 1), consumption of staples contributed slightly more than 60 percent to the household’s total caloric intake. By the last quarter, when poverty had more than doubled, staples contributed about 70 percent on average to the total caloric intake.

**Figure 4: Calories shares by quarter**



During the food crisis, policy responses in some countries emphasized sheltering the urban poor, who, in contrast to rural farm households, were unable to reap the gains of higher prices or produce their own food. The effectiveness of this approach though, is country and context specific. In the case of Afghanistan, a different pattern emerges. There is an increase in poverty in both urban and rural areas, but the increase in rural food poverty is much greater than the increase in urban poverty.<sup>20</sup> **Understanding the channel through which the food price crisis interacted with seasonality and affected the wellbeing of rural household remains to be further investigated** in subsequent analysis.

The data reveal a dramatic overall decline in real food consumption, driven largely by the consumption patterns of the non-poor households. The tables below trace the pattern of per capita food consumption, in nominal and real terms, and food security, as measured by daily per capita calorie intake less than 2100 calories and the portion of households consuming in value less than the food poverty line. These patterns are listed for the poor and nonpoor, and the

<sup>20</sup> For example, in urban areas the proportion of the population spending less on food than the food poverty line increased by 39 percent during the run up in food prices. In rural areas, this figure increased by 119 percent.

findings suggest that the decline in consumption is much greater for the nonpoor. The real value of food consumption drops by about 3 percent for the poor during the run-up in food prices, while this decline for the nonpoor is 28 percent. This is perhaps not surprising since poor households are more likely to consume the cheapest available foods and therefore may not have as much flexibility in reducing food expenditures as non-poor households.

**Table 10: Food Consumption by quarter and poverty status**

quarter	Monthly Per Capita Food Consumption (nominal)	Monthly Per Capita Food Consumption (real)	Daily per capita calorie intake less than 2100 calories	Food consumption below food poverty line
<b>Full sample</b>				
1	1196	1200	24%	20%
2	1122	960	23%	31%
3	1129	789	32%	45%
4	1183	798	34%	42%
<b>Poor</b>				
1	592	597	62%	70%
2	677	582	49%	75%
3	812	570	50%	77%
4	863	581	53%	75%
<b>Non-poor</b>				
1	1357	1361	14%	7%
2	1326	1134	12%	10%
3	1368	954	18%	20%
4	1454	980	17%	15%

Source: 2007/08 NRVA

Table 10 identifies that real expenditures on food by the poor were largely unchanged over the quarters (with only a 3 percent decline). Given that approximately 3/4 of the poor were food poor (i.e. spending less on food than the food poverty line), this provides some evidence that they had little scope for further reductions in food consumption. In contrast, the nonpoor had large declines in their real expenditures on food, falling by more than one-fourth. Below we examine three measures of food diversity, which provide further evidence that the nonpoor adjusted the diversity of their intake, while the diversity scores for the poor were largely unchanged.

**Table 11: Diversity of Food Consumption by Quarter and Poverty**

	<b>Food consumption score (WFP)</b>	<b>Dietary diversity score 1 (FAO)</b>	<b>Dietary diversity score 2</b>
quarter	Full sample		
1	67.8	9.4	16.0
2	61.2	9.1	14.5
3	57.8	8.6	12.4
4	57.7	8.6	12.0
	Poor		
1	52.3	8.5	11.1
2	49.2	8.3	10.8
3	50.7	8.1	10.2
4	51.5	8.0	9.7
	Non-poor		
1	72.0	9.6	17.3
2	66.8	9.4	16.1
3	63.2	9.1	14.1
4	62.9	9.2	13.9
Max	112.0	12.0	42.0

Source: 2007/08 NRVA

By examining measures of food diversity, we can provide supporting evidence to the hypothesis that the poor had less scope for adjusting the composition of their diet. Table 11 displays three measures of dietary diversity, which aim to capture both the frequency and quality of food consumption. The first index, the WFP Food Consumption score equals the weighted sum of the frequencies with which households consume foods within 8 food groups over the previous week. The indicator was developed in southern Africa by the WFP and is used in food security analysis throughout the world.<sup>21</sup> The second index, FAO Dietary Diversity score 1, equals the unweighted sum of the number of food groups (out of 12) consumed by any member of the household inside the home over the previous week. This indicator uses the 12 food groups from the FAO Food Balance Sheets. The third index, Dietary Diversity score 2, equals the unweighted sum of the number of days in the previous week that any member of the household consumed at least one item from each of 6 non-grain food groups.

<sup>21</sup> Weights for food groups range from 0.5 to 4 based on their nutrient density. Frequencies are top-coded at 7 for both the diversity scores 1 and 2.

On average, poor households have lower levels of dietary diversity and nutrient intake, as measured by all three indices over all quarters. But, when looking at the WFP food consumption score and the FAO diversity score 1, these did not decline much for poor households during the food price crisis. The third measure, which counts the number of days that a particular food type was consumed, did decline. In contrast, for nonpoor households, WFP diversity score declined 10 percent during the crisis, and Diversity score 2 declined by 20 percent. This evidence suggests that both the poor and nonpoor reduced diversity and quality in the presence of the large increase in food prices, but the nonpoor had significantly larger reductions. The poor appear not to have had such scope for reducing diversity to cope with the shock. It is of course important to recognize that the population of poor people was also growing during this time – many of those who are poor in quarter 4 may well have been nonpoor in quarter 1. As the overall distribution of consumption has deteriorated, it could be that the consumption distribution of the poor now has more mass near the poverty line.

### III. LABOR AND INCOME-GENERATING ACTIVITIES

Income generating activities and occupations of household members are closely linked to poverty. Lucrative activities can avail households with food and other basic necessities, thus allowing them to avoid or escape the plight of poverty. Analyzing the relationship between household activities and wellbeing can inform poverty-reduction policies. The fact that the Afghan economy is dominated by the informal sector makes the focus of study on activities of the households even more important.

#### HOUSEHOLDS' MAIN SOURCES OF INCOME

**Agriculture is the main source of livelihood in Afghanistan.** Afghanistan continues to be a predominantly rural country. Rural households account for 80 percent of the total population and rural poverty for 84 percent of poverty nationwide. Accordingly, agriculture is critical to both economic development and poverty reduction. The NRVA 2007/08 data shows that 36 percent of Afghan households rely on farming as their main source of income while another 6 percent depend on farm wages as their main source of income (see Table 12).<sup>22</sup> While the economic dependence on agriculture directly correlates with the low level of urbanization, it is worth noting that more than 50 percent of households engaged in farming as their main income source do not produce for markets but are rather simply engaged in subsistence agriculture.

**Urban and rural areas show distinct patterns in activities.** Table 12 also breaks down the distribution of households by their main source of income distinguishing between urban and rural areas.<sup>23</sup> As expected, the urban and rural distributions show marked differences. Households in urban areas derive their livelihoods mainly from non agricultural activities; namely, 44 percent of households report non-farm wage labor as major income source and 37 percent of households are engaged in activities in the trade, craft, and transportation sectors. In rural areas, on the other hand, while agriculture engages more than 50 percent of households, non-farm wage activities are not negligible, accounting for as much as 26 percent of the total.

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<sup>22</sup> The NRVA 2007/08 allows up to 6 sources of income generating activities to be reported. However, the first –or the main—source of income usually accounts for about 75 percent of a household's annual income. Therefore, focusing the analysis on the main income source is reasonable.

<sup>23</sup> Sources of income shown in Table 11 are aggregated from the income activity codes in section 8 of NRVA questionnaire. The codes are categorized as follow. Farming for home consumption: Crop production, Livestock production; Farming for market: Production and sale of field crops, Production & sale of opium, Prod & sales of orchard products, Prod & sale of livestock & products, Sales of prepared foods; Farm wage: Agricultural wage labor (Non Opium), Opium wage labor, Shepherding. Non-farm wage: Miller, Other wage labor, Skilled labor, Salary/Government job/Teacher/NGO/UN, Mining, Military service; Trade, craft & transport: Small business, Petty trade/ shopkeeping, Cross border trade, Firewood /charcoal sales, Handicrafts, Carpet weaving, Taxi/transport; Transfer: Remittances, Pension, Other Government benefits, Rental income, Sale of food aid, Begging, Borrowing.

**Table 12: Distribution of households by main income source (%)**

	<b>Rural</b>	<b>Urban</b>	<b>National</b>
Farming	44.4	2.8	36.1
Home consumption	23.8	1.3	19.4
Market	20.5	1.5	16.8
Wage farm	7.0	0.5	5.7
Wage nonfarm	26.3	44.3	29.9
Trade, craft & transport	12.0	36.6	16.9
Transfers	7.0	5.5	6.7
Other	3.4	10.2	4.7
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

*Source: 2007/08 NRVA*

**Seasonality strongly affects livelihood strategies of Afghan households.** As a result of country’s morphology and climate, the average Afghan household receives income from its principal income source for about  $\frac{3}{4}$  of the year, with significant difference depending on the principal income generating activity itself and on the area of residence (Table 13). As expected, rural households – by receiving the bulk of their incomes from agricultural activities, either as self employed or as waged labor - are the most exposed to seasonality not being able to maintain their main livelihood source for half of the year. As shown in Figure 5, during spring and, most of all, during winter season the share of households reporting agriculture related activities as main income source is significantly smaller than the share of those relying on transfer or on trade, craft and transport.

**On average, 40 percent of Afghan households do not receive any revenue from their principal income source during winter months.** Confirming previous results, rural households relying on agriculture (particular those relying on subsistence farming) are the most affected by seasonality. As shown in Figure 5, only 15.3 percent of rural households whose principal income source is farming for home consumption are able to maintain their source of income during winter months. This share contrasts with 34.6 percent of households selling their farm produces on the market and about 45 percent of those engaged in agricultural wage labor. In winter, production and sales of livestock assets (41 percent), wage labor outside agriculture (20 percent) and borrowing (13 percent) are secondary sources of livelihoods for self-subsistence farmers. In addition to winter months, about 60 percent of households engaged in subsistence farming need to look for alternative income sources during spring as well. Guaranteeing the availability of productive “secondary” income sources is a critical requisite to help these households smoothing consumption throughout the year. In particular, developing “seasonally sensitive” safety nets and policies aimed at creating wage employment outside agriculture would prevent these households

from depleting their assets and from contracting excessive debt, with potential substantial mitigating impact on poverty.

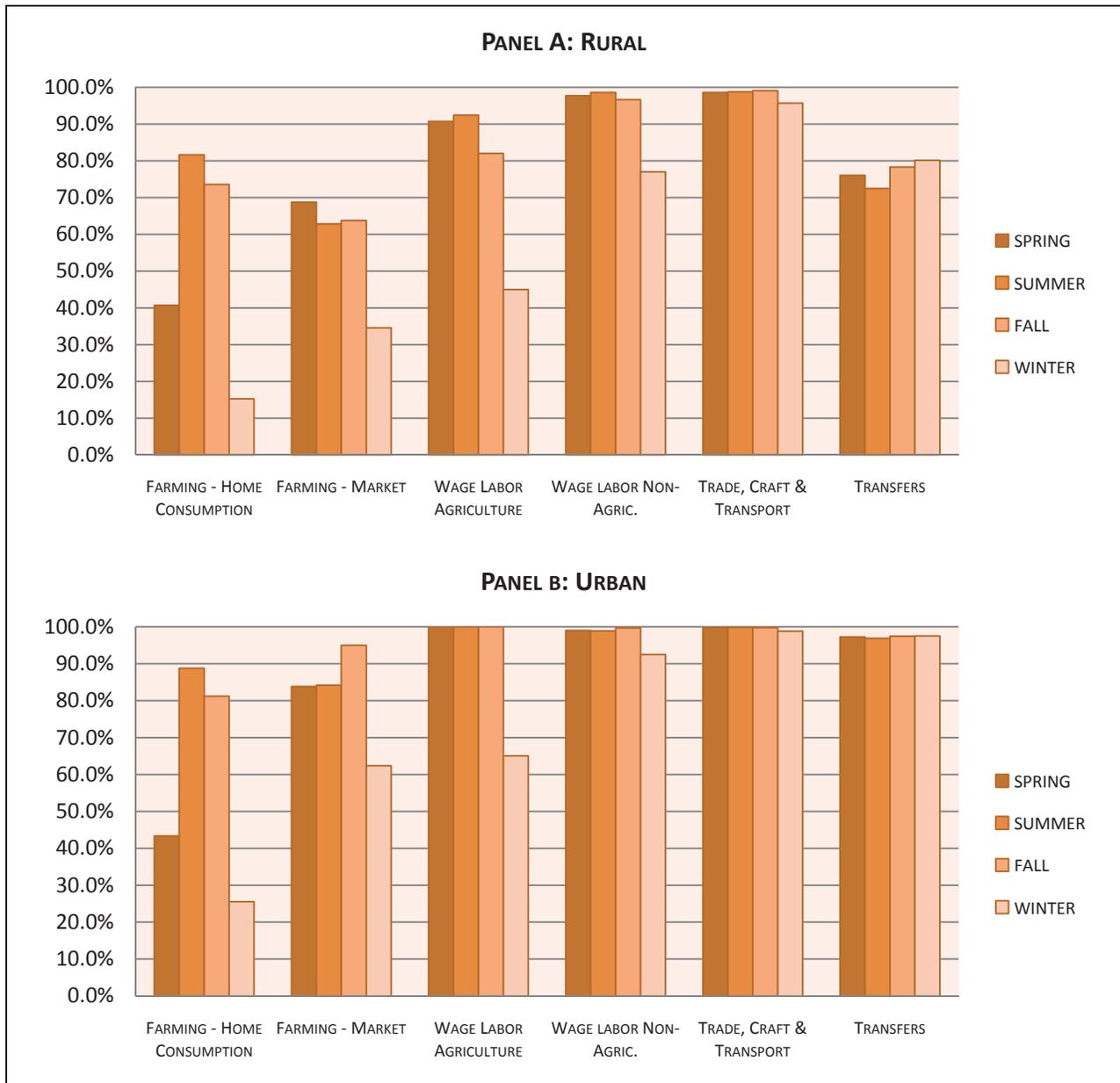
**Table 13: No. Seasons households receive income from main activity**

	Rural		Urban		National	
	Mean	Median	Mean	Median	Mean	Median
<b>Farming - Home Consumption</b>	2.11	2	2.41	2	2.12	2
<b>Farming – Market</b>	2.30	2	3.25	4	2.32	2
<b>Wage Labor Agriculture</b>	3.10	3	3.65	4	3.11	3
<b>Wage labor Non-Agric.</b>	3.70	4	3.90	4	3.76	4
<b>Trade, Craft &amp; Transport</b>	3.92	4	3.98	4	3.95	4
<b>Transfers</b>	3.08	4	3.89	4	3.21	4
<b>Other</b>	3.61	4	3.95	4	3.75	4
<b>Total</b>	<b>2.97</b>	<b>4</b>	<b>3.91</b>	<b>4</b>	<b>3.16</b>	<b>4</b>

*Source: 2007/08 NRVA*

**Diversification is a key characteristic of Afghan households’ livelihood strategy.** Directly connected to the predominance of agriculture and to seasonality, Afghan households have to rely on more than a single income generating activity to make ends meet. As shown in Table 14, diversification is particularly important in rural areas, where the first income source contributes on average for no more than 71 percent to the household’s total annual income. In contrast, the corresponding figure is 89 percent in urban areas. As a consequence, rural households – on average – engage in twice as much income generating activities than their urban counterparts. Moreover, relying on agriculture or transfers for the main income source is generally associated with a greater degree of diversification in both rural and urban households.

**Figure 5: Seasonality by main income source.**



Source: 2007/08 NRVA

**Table 14: Share of main income source to total income and number of income sources**

Main Income Source	Rural		Urban	
	Share 1 <sup>st</sup> activity to total HH income	Average # of income sources	Share 1 <sup>st</sup> activity to total HH income	Average # of income sources
Farming - Home Consumption	62.4	2.5	67.4	2.4
Farming - Market	67.6	2.5	76.1	1.8
Wage Labor Agriculture	74.0	2.1	88.4	1.5
Wage labor Non-Agric.	78.0	2.0	90.0	1.4
Trade, Craft & Transport	78.7	2.1	90.3	1.4
Transfers	65.7	2.8	76.0	1.9
Other	78.8	2.0	93.3	1.3
<b>Total</b>	<b>71.1</b>	<b>2.3</b>	<b>89.2</b>	<b>1.4</b>

Source: 2007/08 NRVA

**Poverty at the household level is the highest in rural areas and concentrated among households relying on transfers as their main income source.** Household level poverty rates disaggregated by main income source are presented in Table 15. In both urban and rural areas, poverty rates tend to be lower for households whose main activities are in trade, craft and transport, at 18.6 percent and 28.7 percent respectively. On the opposite side of the poverty spectrum, households relying on transfers as main income source are the poorest in both urban and rural areas.<sup>24</sup> Dependence on wage labor – irrespective of the sector and area of residence – is also strongly correlated with the household being poor, suggesting the poor quality of employment opportunities in the Afghan labor market.

**Poverty rate for rural households engaged in farming activities varies depending on their ability to access markets.** In rural areas, farming does not necessarily imply higher incidence of poverty. As shown in Table 15, the poverty rate of households selling farm produces on the market is 6 percentage points lower than the one of household farming for home consumption. Moreover, the poverty rate among the former group is the lowest among rural households, similar to the poverty rate of households relying on services in trade, craft and transport. While this finding requires a further analysis of households’ assets and attributes, policies aimed at increasing farm productivity – improving irrigation infrastructures, access to land and credit – are likely to have the highest poverty reduction impact in rural areas, where most of the poor population is concentrated.

<sup>24</sup> In particular, within the transfer category, poverty is the highest among households forced to borrow in order to sustain their livelihood (59.4 and 44.8 household poverty rate in rural and urban areas, respectively) and the lowest among urban households relying on rental incomes (13.7 percent).

**Table 15: Household level poverty rates by main source of income and area of residence**

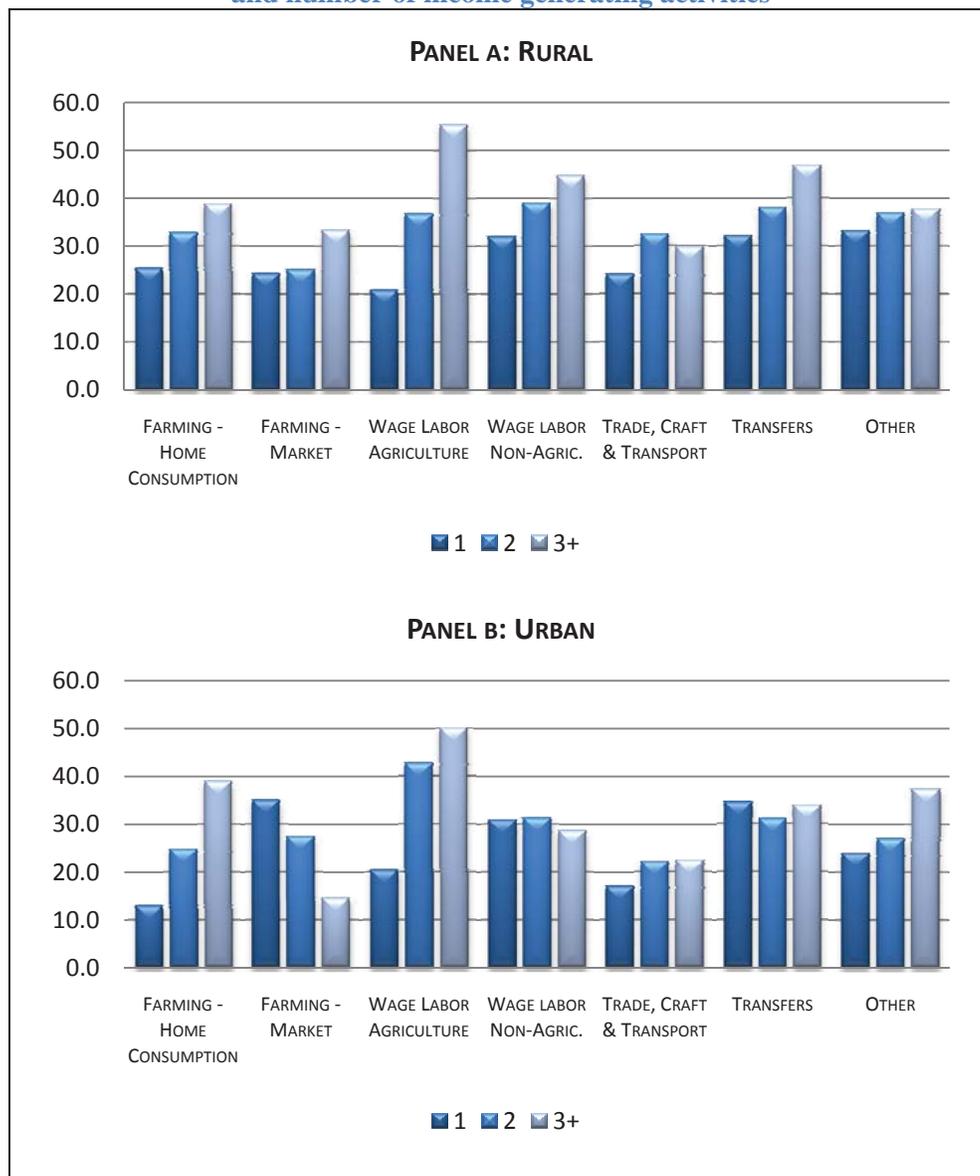
	<b>Rural</b>	<b>Urban</b>	<b>National</b>
<i>Farming - Home Consumption</i>	34.7	27.8	34.6
<i>Farming – Market</i>	28.4	27.9	28.4
<i>Wage Labor Agriculture</i>	36.8	27.8	36.6
<i>Wage labor Non-Agric.</i>	38.3	30.8	36.1
<i>Trade, Craft &amp; Transport</i>	28.7	18.6	24.3
<i>Transfers</i>	42.4	32.7	40.8
<i>Other</i>	<b>35.8</b>	<b>25.3</b>	<b>31.3</b>

Note: Household level weights used.

Source: 2007/08 NRVA

**Diversification in income generating activities does not necessarily reduce the risk of falling into poverty** As previously discussed, Afghan households’ livelihood strategy are strongly affected by seasonality and by the area of residence. For rural households engaged in agriculture, relying on more than one income source throughout the year is a necessity, especially during winter and spring months. Nevertheless, preliminary results seem to suggest that having to rely on multiple income sources is strongly correlated with higher poverty incidence, especially in rural areas (Figure 6). Understanding whether diversification strategies are successful in preventing people from falling into poverty and have to be seen in a positive light as ex ante risk management strategy, or in a negative light as arising for the poor quality of the main source of income would require more in depth analysis.

**Figure 6: Household level poverty rate by main income source and number of income generating activities**



Source: 2007/08 NRVA

## LABOR MARKET CHARACTERISTICS

The Afghan labor market is characterized by a strong urban-rural divide. According to NRVA data and considering the national labor market as a whole, 66.5 percent of individuals in the working age population (aged 16 and above) participate in the labor market, 62.5 percent of individuals in the working age population are engaged in some form of employment during the month preceding the date of interview<sup>25</sup>, whereas 7.85 percent of the labor force can be broadly considered as unemployed<sup>26</sup> (Table 16). Interesting differences in labor market functioning emerge when disaggregating the picture by area of residence. In particular, the urban labor market shows significantly lower participation and employment rates, mainly due to the lower participation of women, youth and elderly in urban labor markets (Figure 7).

**The relatively low level of open unemployment is counterbalanced by the severity of underemployment, especially in rural areas.** More than 48 percent of employed individuals work on average for less than 35 hours per week and could be broadly considered as “underemployed”<sup>27</sup>. Underemployment is naturally correlated with the urban-rural divide in labor market participation (and employment) patterns. In particular, - higher participation in rural areas is associated with a substantially higher underemployment rate and, possibly, with a relatively higher prevalence of poor quality jobs.<sup>28</sup> Supporting evidence toward these findings is also available when looking at patterns of labor supply within households. As shown in Table 17 underemployment and participation to the labor market are positively correlated, suggesting that the poor quality of employment opportunities pushes more household members to work, or look for employment just to make ends meet.

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<sup>25</sup> More specifically, they report either to have (i) worked for an organization or individual, or (ii) done any agricultural work, even free, on land owned, rented or used by household, or (iii) done any non-agricultural work, on own account, in a business enterprise belonging to the household or member of the household, or (iv) done any occasional paid job. In addition, 1.2 percent of the working age population was further considered as employed as comprising individuals who reported to have already found a job which will start later, and those who have a permanent or long term job from which he/she was temporarily absent in the last 30 days because of: (i) own illness, (ii) maternity, child rearing leave, (iii) household member sick, (iv) work suspension, (v) temporary work load reduction, (vi) security situation.

<sup>26</sup> The category includes those who did not report work in the last 30 days but reported to be (i) looking for a job, (ii) have a permanent or long term job from which he/she was temporarily absent because of bad weather or enterprise closure (iii) look for employment during past 30 days because awaiting for the busy season, (iv) did not look for employment during past 30 days because no chances to get a job, or no jobs available (discouraged workers). Taken together, “unemployment” related to bad weather and seasonality contributes for 1.6 percentage points to the total unemployment rate.

<sup>27</sup> The exact definition of underemployment would also require assessing workers’ willingness to work for additional hours. Unfortunately, the survey instruments do not have a specific question enabling to distinguish effective “underemployment” from those willingly working “part-time” and not wishing to work for additional hours. Improving NRVA instruments to uncover the effective magnitude of underemployment would be useful for a more complete understanding of labor market functioning in Afghanistan.

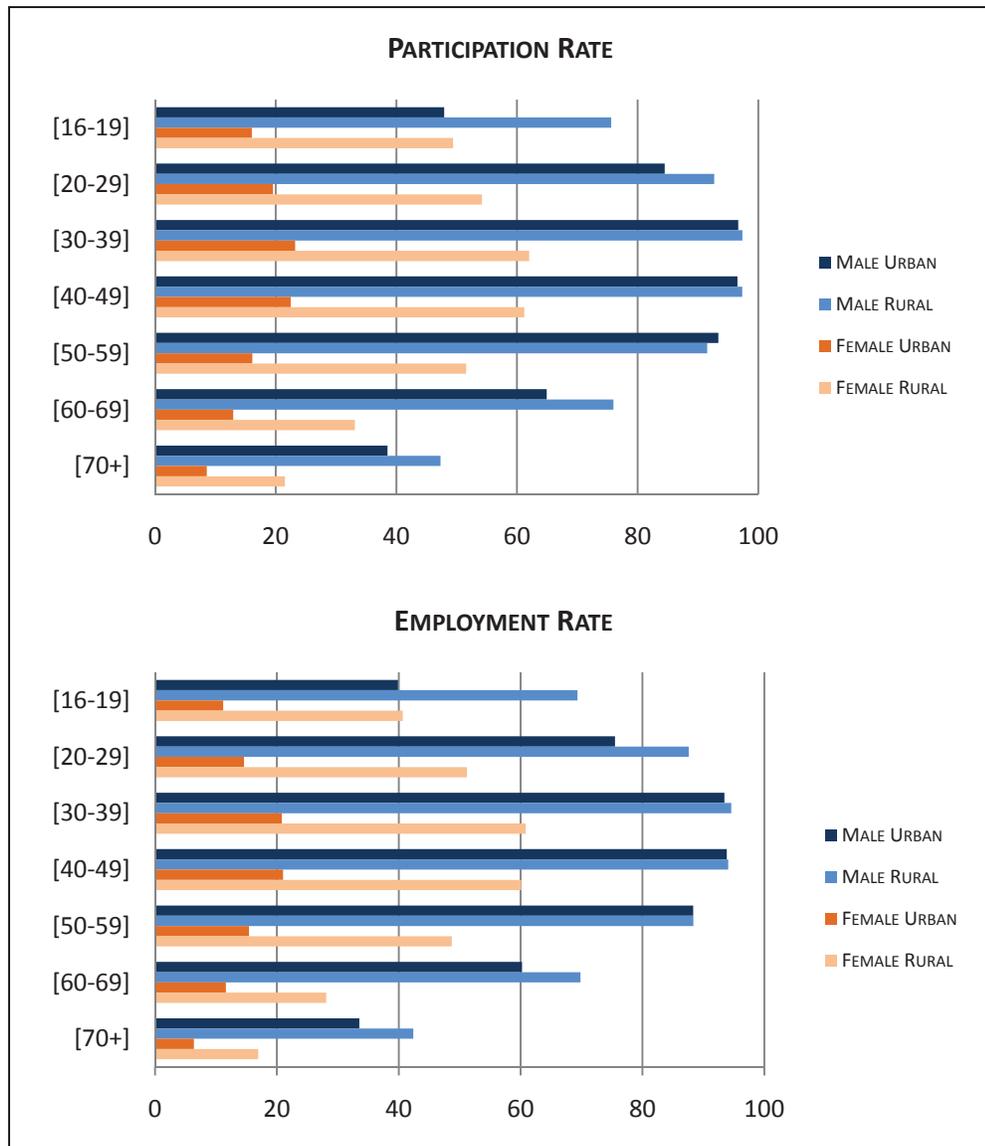
<sup>28</sup> Underemployment affects 53% of employment in rural areas against 22% in urban centers.

**Table 16: Labor market indicators**

	Rural	Urban	National
<b>Participation rate</b>	71.46	48.84	66.53
<b>Employment -population ratio</b>	67.59	44.11	62.47
<b>Unemployment rate</b>	7.35	10.47	7.85
<b>Underemployment rate</b>	53.06	21.51	48.16

Source: 2007/08 NRVA

**Figure 7: Participation and Employment rates by age, gender and area of residence**



Source: 2007/08 NRVA

**Individuals from poorer households are more likely to be active on the labor market and to be underemployed.** Table 17 shows how participation and underemployment rates vary with household welfare. Holding constant the total size of the household’s labor force<sup>29</sup>, households in lower quintiles of the total expenditure distribution have – on average – both a higher number of members participating in the labor market and a higher number of underemployed. In Afghanistan, as in most developing countries, labor endowment is one of the most critical assets for households. For individuals living in poorer households being engaged in some form of income generating activity, irrespective of its quality, is a necessity to make ends meet rather than a choice. Moreover, the widespread availability of poor quality jobs in the informal sector makes open unemployment a typically rare phenomenon, with adjustments occurring at the intensive margin – number of hours and/or days worked – and with movements in and out of the labor force – between activity and inactivity.

**Informality is a distinguishing feature of Afghan labor market.** Households are the first “employer” in Afghanistan. Besides playing a key role in shaping labor supply, both urban and rural households in Afghanistan are crucial in determining labor demand. Table 18 shows the distribution of Afghan workers by their status in employment. The categories of self employment and unpaid family workers together represent the vast majority of jobs in both urban and rural areas, accounting for about 80 percent and 59 percent of jobs, respectively. Both in rural and urban areas, underemployment is the highest among unpaid family workers. However, while self employment in rural areas has the second highest underemployment rate, the same does not hold in urban areas where the same position in the ranking belongs to daily laborers (Figure 8). The main difference between self employment in rural and urban areas lies in the sector of activity: while rural self employed mainly work in agriculture, the principal sector of their counterparts in urban areas is retail trade. On the other hand, in both urban and rural areas, the main sector of employment for daily laborers is construction.

**Table 17: Household level participation and underemployment**

Quintiles of Real HH monthly expenditure	Participation Rate	Underemployment Rate
1 (poorest)	0.74	0.47
2	0.73	0.46
3	0.69	0.43
4	0.64	0.38
5 (richest)	0.53	0.30

Source: 2007/08 NRVA

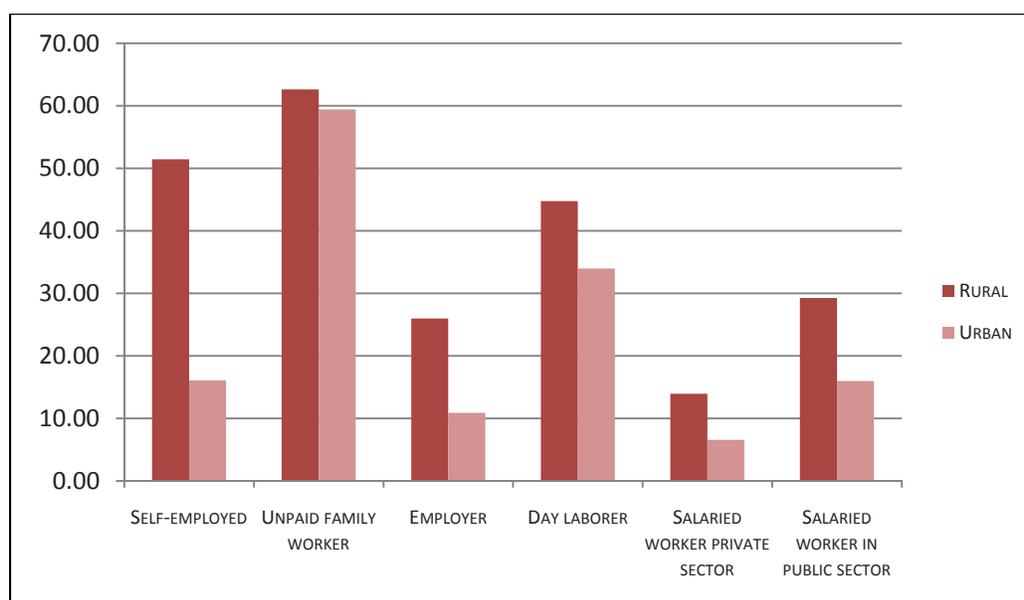
<sup>29</sup> Total number of people aged 16 and above.

**Table 18: Type of employment, by area of residence**

	Rural	Urban	National
Self-employed	43.24	49.54	44.22
Unpaid family worker	36.92	9.59	32.67
Employer	0.52	0.33	0.49
Day laborer	14.03	11.95	13.71
Salaried worker private sector	1.85	8.99	2.96
Salaried worker in public sector	3.43	19.6	5.95

Source: 2007/08 NRVA

**Figure 8: Underemployment rate, by status in employment and area of residence**



Source: 2007/08 NRVA

### CHILD LABOR<sup>30</sup>

One of the major constraints to Afghanistan's economic development has been the low level of human capital of its population. While school enrollment has improved over the past decade,

<sup>30</sup> The NRVA instrument does not allow for a complete match with ILO's definition of child labor (C138 Minimum Age Convention, 1973, see: <http://www.ilo.org/ilolex/cgi-lex/convde.pl?C138>). In particular, it is not possible to distinguish between hazardous, light and regular labor. For this reason, we do not identify labor as either light or hazardous, but rather consider child labor as any child between the ages of six and fifteen engaged in any work for pay or work in the family business including producing handicrafts, assisting with agriculture or livestock, or collecting things in the street for household use.

attendance rates remain low and wide gender disparities persist. As shown in the economic literature, child labor is closely related to human capital investment decisions and can significantly influence lifetime patterns of employment, earnings, and, ultimately, perpetuate the intergenerational transmission of poverty.

Much of the literature on child labor focuses on the relationship between child labor and poverty. In a review of empirical studies, Sasaki (1999) finds that household income is generally negatively associated with participation of children in labor activities. In Peru, Ray (2000) shows that a one-percent increase in adult male wages leads to a one-percent decrease in the probability of children's participation in the labor market. Edmonds and Turk (2004) finds that seemingly permanent increases in income in Vietnam explain most of the observed decline in child labor.

Other studies find that the child labor is driven by the availability of economic opportunities inside the household, especially in rural areas. Using data from Nicaragua, Kruger (2001) tests the effects of particular income-generating activities —such as agriculture, commerce, mining, manufacturing, construction, transportation, and community— on child labor. He finds that overall children from self-employed households —whether agricultural or other entrepreneurial activity— had a higher probability of working. However, the effect of child labor on school attendance differs by type of activity: agricultural work removes kids from schools, but participation in commerce does not. Kruger suggests that the differential of impact of activities may be due to production technology: if agriculture is more labor intensive than other activities, then we could expect it to require more time from children.

Similarly, Canagarajah and Coulombe (1997), Nielsen (1998), Edmonds and Turk (2004) find a strong positive association between child labor and household self-employment in agriculture in Ghana, Zambia, and Vietnam, respectively. Similar results are derived by Jensen and Nielsen (1997:40) who find negative correlation between land holdings and schooling. This is in line with Bhalotra and Heady's (2003) analysis of the 'wealth paradox': the surprising observation that children in land-rich households are often more likely to work than children of land-poor households. Using survey data from rural Pakistan and Ghana, the authors hypothesize that in the absence of perfect labor (and land) markets, owners of land who are unable to productively hire labor on their farms have an incentive to employ their children.

**Child labor in Afghanistan mainly affects boys and it is higher in rural labor markets.** The NRVA data indicate that out of 7.88 million Afghan children in the 6 – 15 age group, 18 percent are engaged in some form of economic activity (working either for pay, in family business, handicrafts, assisting with agriculture or livestock, or collecting in the street). Male child labor is almost twice that of females' and child labor is almost three times higher in rural than urban areas (Table 19). Interesting urban-rural differences emerge also considering the correlation between child labor and poverty status at the household level. In particular, while child labor in rural areas seems to be independent of poverty status, it is significantly higher among poor households in urban areas. Similar gender and geographical patterns emerge also when

considering the “intensity” of child labor as captured by the number of weekly hours spent in paid economic activities (Table 20).

**Place of child labor differs by gender and residence.** Overall, a higher proportion of girls that work, do so at the household dwelling (73 percent) in contrast to 25 percent of boys. There is a different pattern of place of child labor by residence, particularly for boys. In rural areas, more than 50 percent of boys work in the farm, but in urban areas boys are mostly employed in shops, market or restaurants (between 54 and 42 percent). The proportion of girls that work inside the home is slightly greater in urban areas (between 90 and 82 percent) than rural areas (72 percent).

**Child labor might not be the only determinant of poor human capital investments.** As shown in Table 22, 42 percent of children aged 6-15 are neither engaged in economic activities nor studying, with striking variation by gender and area of residence. While urban and rural differences in children’s activities might reflect differential accessibility of schools, gender differences might be correlated with cultural norms more difficult to deal with. Further analysis on these issues and on the level of association between child labor and human capital investment would help better tailoring policy interventions in education.

**Table 19: Child labor (%) by gender, poverty, and residence**

	<i>All</i>	<i>Rural</i>		<i>Urban</i>		
		<i>Non-poor</i>	<i>Poor</i>	<i>Non-poor</i>	<i>Poor</i>	
<b>Boys</b>	23	26	26	8	13	***
<b>Girls</b>	13	15	16	2	6	***
<b>Total</b>	18	20	21	5	9	***

*Note: Asterisks indicate whether poor and non-poor and urban-rural differences are statistically significant (where \* indicates  $p < 0.1$ , \*\*  $p < 0.05$ , and \*\*\*  $p < 0.01$ ) as estimated by design-adjusted Wald tests. Weighted estimates from a sample of 48,259 observations representing a population of 7.84 million children.*

Source: 2007/08 NRVA

**Table 20: Child labor (hours per week)**

	<i>All</i>	<i>Rural</i>		<i>Urban</i>	
		<i>Non-poor</i>	<i>Poor</i>	<i>Non-poor</i>	<i>Poor</i>
<b>Boys</b>	30	28	30	40	45
<b>Girls</b>	14	13	15	9	13
<b>Total</b>	24	23	24	33	35

Note: See above.

Source: NRVA 2007/09

**Table 21: Place of child labor (%) by gender and poverty**

	<i>Total</i>	<i>Boy</i>	<i>Girl</i>
<i>At the household dwelling</i>	41	25	73
<i>Plantation/farm/garden</i>	39	50	19
<i>Shop/market/kiosk/restaurant</i>	5	7	1
<i>Other</i>	15	19	8
<i>Number of observations</i>	9,071	5,900	3,171
<i>Estimated population size</i>	1,416,683	932,009	484,674

Note: Household-level weights used.

Source: 2007/08 NRVA

**Table 22: Child activity (%) by gender, poverty status, and residence**

<i>Gender</i>	<i>Activity</i>	<i>Poor</i>	<i>Non-Poor</i>	<i>Urban</i>	<i>Rural</i>	<i>Total</i>
<i>Male</i>	<i>Study only</i>	43	48	69	40	46
	<i>Work only</i>	13	11	3	14	12
	<i>Study and work</i>	11	10	7	12	11
	<i>Neither</i>	33	31	22	34	32
	<i>Total work</i>	24	22	10	26	23
	<i>Total study</i>	54	58	75	52	56
<i>Female</i>	<i>Study only</i>	32	35	60	27	34
	<i>Work only</i>	10	8	2	11	9
	<i>Study and work</i>	4	4	2	4	4
	<i>Neither</i>	54	53	36	58	53
	<i>Total work</i>	14	12	4	15	13
	<i>Total study</i>	36	39	62	31	38
<i>Total</i>	<i>Study only</i>	38	42	65	34	40
	<i>Work only</i>	11	10	2	13	11
	<i>Study and work</i>	8	7	4	8	7
	<i>Neither</i>	43	41	29	45	42
	<i>Total work</i>	19	17	7	21	18
	<i>Total study</i>	45	49	69	42	47

Note: Household-level weights used; estimates based on sample of 48,058 observations representing a population of 7.82 million children. "Study" is defined if the child is currently attending an educational institution whereas "work" is defined if the child worked in the past week on non-household chores. 'Total work' refers to children that work only and children that work and study. 'Total study' refers to children that study only and children that work and study.

Source: 2007/08 NRVA

## IV. DEMOGRAPHIC & SOCIOECONOMIC CHARACTERISTICS OF POVERTY

**Poorer households are larger.** Demographic factors are some of the strongest correlates of poverty in Afghanistan. A household's demographic feature such as household size can directly affect its wellbeing. For example, the number of family members in a household can put pressure on food and other resources, therefore, significantly pushing the household toward poverty. The overall average household size in Afghanistan is 7.3 persons. Poorer households are larger with an average size of 8, while nonpoor households have on average 6.9 members. This difference is statistically significant.<sup>31</sup> This finding is consistent with similar evidence for many other countries, whenever per capita indicators are used as measures of individual welfare.<sup>32</sup> Per capita indicators of course do not allow for economies of household size in consumption, and the results suggest that such economies would need to be substantial to reverse the observed positive relation between poverty and household size. The relative difference in household size between poor and nonpoor households is slightly greater in urban areas. Above, is more detail on demographic factors in terms of number of children and elderly in households, age of household heads, and educational attainment.

**Poorer households have more dependents.** Like household size, household composition also differs by poverty status. The key result is that poorer households tend to have higher dependency ratios. The dependency ratio is defined as the ratio of the number of members in the age groups 0-15 years and above 60 years to the number of members of working age 15-60 years. The ratio is expressed as a percentage. The average dependency ratio in Afghanistan is 151 percent (Table 23). In poor households though, the dependency ratio is 167 percent; or 25 percentage points higher than the ratio for nonpoor households. In urban areas, the difference between poor and nonpoor households is even more pronounced. The urban poor households have a dependency ratio of 161 percent compared to 120 percent for urban, nonpoor households.

**The pattern between poverty and number of dependents can be explained by the fact that dependents put pressure on resources.** As the number of dependents grows and the number of earners remains constant, resources, both in terms of food and non-food, will be shared among all the members. As a result, the level of resource per capita becomes smaller and it is reflected in the poverty estimates. However, this relationship must be interpreted with some caution, since the consumption measure used to define the poor does not take into account economies of scale (i.e. the idea that a family of four can live more cheaply than twice the cost of a family of two). If economies of scale were incorporated into the poverty measure, the welfare of larger households and/or households with more children would turn out to be more than what their per capita

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<sup>32</sup> For a documentation of the evidence on this see Lipton and Ravallion (1995). Also see Lanjouw and Ravallion (1995) for a discussion of how poverty-household size relation is modified by the presence of economies of size in consumption.

consumption would suggest. This would imply that the poor – nonpoor differences observed in Table 23 may overestimate the actual relationship.

**Table 23: Dependency Ratio (%) and poverty**

Area	Non-poor	Poor	Total
Urban	120	161	132
Rural	148	168	155
Kuchi	164	168	166
<b>Total</b>	<b>142</b>	<b>167</b>	<b>151</b>

*Note:* Household-level weights used.

*Source:* 2007/08 NRVA

**No clear pattern between poverty and age of household head.** In many countries, age of the household head is correlated with poverty level of households because of the life cycle of economic activities in the households. Households with younger heads tend to be in poverty because they have not yet accumulated assets and they may be raising young children. As households mature, they may experience less poverty. In the context of Afghanistan, interpreting this relationship is more complex due to the extended family structure. Households consist of many generations and the person identified as the head of the household may, or may not, be the main earner in the households. Similarly, households with older heads may mean that there are more earners in the household (possibly a lower dependency ratio); therefore, we may see a decline in the poverty level in households with older heads. Table 24 can be interpreted as showing both types of patterns. From middle-aged heads (between 31-40 years of age), poverty rates decline from 37 percent to 28 percent in households whose heads are older than 60 years old. But, for those heads under 30, the relationship is the opposite – poverty is decreasing as the head ages.

**Table 24: Poverty by age of household head**

Age of head (years)	Poverty rate (%)
20 or less	35.2
21-30	27.1
31-40	36.6
41-50	36.0
51-60	31.3
Over 60	28.1

*Note:* Household-level weights used.

*Source:* 2007/08 NRVA

## ACCESS TO EDUCATION

**Poverty by educational level of the household head.** Education is closely linked to the poverty level of household in Afghanistan. It is typically expected that education will increase a person's employment opportunity and earnings. The NRVA 2007/08 reveals that both literacy and education level of household heads tend correlate with lower level of poverty. In Table 25, the poverty rate among households whose head does not have any education is as high as 35 percent. The poverty rate falls steadily as the head becomes more educated; the rate drops to 23 percent among households whose head has high school education. The pattern also manifests itself when considering literacy; 35 percent of households with an illiterate head are poor, compared to 27 percent of households with a literate head.

**Table 25: Poverty by education of household head**

Education level	Poverty rate (%)
No education	35.3
Primary school	31.0
Middle school	30.4
High school	21.9
Teacher college	22.9
University	8.7
Post-graduate	6.7

*Note: Household-level weights used.*

*Source: 2007/08 NRVA*

There are many dimensions to overall wellbeing in addition to poverty, such as health and education status. One way to assess these other dimensions, is to examine access to basic public services of Afghan people, regardless of their poverty status. Poverty usually manifests itself not only in terms of inferior ownership of goods and basic needs; the poor tend to lack voice and access to quality services, even though they are publicly provided. Basic human development services, aimed to improve the health and education of the people, tackle many of the root causes of poverty. Providing education to the younger generation and investing in their health can lift the poor out of poverty and break the vicious cycle that traps the poor in poverty for generations. Enhanced access to these basic services can help level the playing field for youth across the income spectrum.

**Coverage of basic education in Afghanistan remains low and the gender gap persists.** The NRVA 2007/08 data reveal that the net primary school enrollment rate is 37 percent for children

aged 6 to 9 (Table 26). Comparing to international standard, the rate is markedly low.<sup>33</sup> Coverage of basic education is generally measured by the net primary school enrollment rate, which is the proportion of primary school age children who are enrolled in primary grades. In this analysis, we focus on the enrollment of children aged between 6 and 9 years old in order to focus on children who are entering the education system. Looking at the trend, the enrollment rate has improved dramatically from 25 percent in 2005. However, a large gender disparity in primary enrollment still exists. Overall, girls lag behind boys in primary enrollment by 12 percentage points.

It is noteworthy though, that while there is a large gender gap and enrollment rates are relatively low, there is very little difference in enrollment rates between the poor and nonpoor. Enrollment rates for both boys and girls in the bottom 20<sup>th</sup> percentile of consumption distribution (the poorest) actually have enrollment rates that are the same (actually 1 percentage point higher) as boys and girls in the second richest quintile (60<sup>th</sup> – 80<sup>th</sup> percentile of the consumption distribution). Certainly one candidate interpretation of this finding is that that access to and enrollment in schools can be viewed as pro-poor characteristics (the poor appear to be equally sharing in the benefits of the education program).

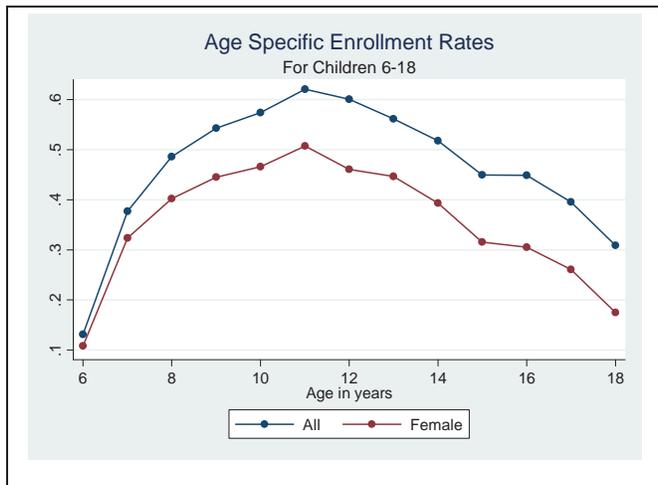
**Table 26: Net primary enrollment of children aged 6-9 by quintile**

<b>PC quintile</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
<b>1 (poorest)</b>	41	31	36
<b>2</b>	42	27	34
<b>3</b>	40	28	34
<b>4</b>	40	30	35
<b>5 (richest)</b>	51	40	46
<b>Total</b>	43	31	37

*Source: 2007/08 NRVA*

<sup>33</sup> The average net enrollment rate of Low Income Countries (LIC) in 2007 is at 78 percent. If we use the most liberal age appropriate range for primary education of 7 to 12 years old, the NER for Afghanistan in 2007 is about 50 percent, much lower than the LIC average.

**Figure 9: Age specific enrollment rates**



Source: 2007/08 NRVA

**Age-specific enrollment rates help explain low primary enrollment and the gender gap.** Enrollment rates in Afghanistan peak at 62 percent when children reach the age of 11 years old (Figure 9). The pattern of enrollment suggests that overage enrollment is a widespread issue. Comparing the female and overall enrollment profiles, one can observe that the age-enrollment profile of girls is similar to the overall pattern. The gap between girls’ enrollment (lower line) and overall enrollment (upper line) remains large at more than ten percent in children aged 10 years or more.

**Table 27: Primary enrollment of children aged 6-9 by poverty status and area of residence**

	Non-poor			Poor		
	Boys	Girls	All	Boys	Girls	All
<b>Urban</b>	58	52	55	49	43	46
<b>Rural</b>	41	28	35	43	29	36
<b>Kuchi</b>	17	10	14	14	5	10
<b>Total</b>	43	31	38	41	30	36

Source: 2007/08 NRVA

**Large gap in primary enrollment rates between the poor and nonpoor urban areas.** An urban-rural disparity exists in basic education coverage. Primary enrollment rates of children aged between 6 and 9 years old in urban areas is at 52 percent while the rate is 35 percent for rural areas and 11 percent for Kuchi communities. Analyzing urban-rural disparity and

households' poverty status reveals an interesting finding. Table 27 indicates that the difference in national level enrollment rates between the poor and non-poor is not significantly large (38 percent vs. 36 percent). However, the disparity exists in urban areas. Comparing primary enrollment rates among the non-poor and the poor, urban areas exhibit a large disparity (55 percent vs. 46 percent) while there is no significant disparity in rural areas (35 percent vs. 36 percent). This result is likely to suggest that poverty status does not appear to be a crucial factor that limits children from attending schools in rural areas. To promote higher enrollment, one need to consider other factors such as culture, views to schooling, school location, quality of school, safety of students, etc. Further analysis on this issue can help identify the driving factors in both urban and rural areas.

**Research identifies long-run benefit to women's education.** Recent literature from Pakistan suggests that maternal education has an impact on children's educational outcomes. Children of mothers with some education spend 75 minutes more on educational activities at home compared with children whose mothers report no education at all. Mothers with some education also spend more time helping their children with school work. Test scores for children whose mothers have some education are higher in English, Urdu and mathematics (Andrabi, Das, and Khwaja, 2009).

## ACCESS TO HEALTH CARE

The official immunization schedule for children in Afghanistan includes BCG immunization against tuberculosis at birth; DPT3 and Hepatitis B at 6, 10, and 14 weeks; 3 oral polio vaccine at birth, 6, 10, and 14 weeks, and 9 months; and measles vaccine at 9 and 18 months (WHO 2008). As is standard in many surveys of immunization coverage – including the DHS – immunization coverage was reported for children aged 12-23 months, as all children should have received full vaccination coverage by 12 months of age.

**Table 28: Immunization Rates**

	BCG	OPV3	DPT3	Measles	Full Immunization	No Vaccination
<b>Non-poor</b>	77	72	45	59	39	12
<b>Poor</b>	68	70	38	52	33	17
<b>Total</b>	74	71	43	56	37	14

*Source: 2007/08 NRVA*

**In terms of health care investments in children, the NRVA data show that the poor in Afghanistan are still at a disadvantage.** People in poor households generally receive

significantly less essential health services than the nonpoor, either in antenatal care, birth attendance, etc.

**Access to antenatal care drops as households becomes poorer.** Antenatal care helps ensure that the children are born with desirable birth outcomes—high birth weights and free of preventable diseases. Such desirable birth outcomes have been shown to correlate with high cognitive development. The NRVA 2007/08 collected data of women whose children were born between August 2005 and the interview date. Looking at the percentage of pregnant women who visit anyone for prenatal care by consumption quintile (Table 29) shows a strong positive correlation between consumption and access. This table also reveals that less than one in four pregnant women in the poorest quintile receive any antenatal care; however, this ratio increases progressively with the consumption quintiles. In the richest quintile (fifth quintile), access to antenatal care more than doubles (57 percent).

**Table 29: Antenatal care by consumption quintile**

PC quintile	Antenatal care (%)
1 (poorest)	24
2	29
3	38
4	42
5 (richest)	57
<b>Total</b>	<b>37</b>

*Source: 2007/08 NRVA*

**Skilled birth attendance in Afghanistan is low by any standard.** Another important aspect of child and maternal care is safety in child delivery. Afghanistan has one of the highest maternal mortality rates in the world, as high as 1,800 deaths per 100,000 live births.<sup>34</sup> Using skilled personnel for delivery can improve such situations. In this case, we consider doctors, nurses, and midwives to be skilled personnel for child delivery. The most recent data NRVA 2007/08 shows that only 25 percent of child deliveries were attended by skilled personnel.<sup>35</sup> This figure is still much lower than the average of low income countries in 2007, which stands at 43 percent.<sup>36</sup>

**Skilled birth attendance is much lower among the poor** when comparing across the consumption spectrum. While the coverage among the richest quintile is at 49 percent, the

<sup>34</sup> Annual number of deaths of women from pregnancy-related causes per 100,000 live births. This figure is adjusted for underreporting and misclassification. Source: UNICEF country statistics.

<sup>35</sup> The data referred to a woman's last live birth in the 24 months preceding the NRVA 2007/08 survey.

<sup>36</sup> DDP, World Bank.

coverage drops to only 10 percent among people in the poorest quintile (Table 30). A more in-depth analysis of the types of providers can explain the current pattern of skilled birth attendance in Afghanistan. Table 31 shows that the main types of skilled providers are doctors and midwives. Attendance by midwives appears to be popular among poorer population (in the first to third quintiles).

**Table 30: Skilled birth attendance by consumption quintile**

PC quintile	Skilled birth attendance (%)
1 (poorest)	10
2	15
3	23
4	31
5 (richest)	49
<b>Total</b>	<b>25</b>

Source: 2007/08 NRVA

**Table 31: Types of providers by consumption quintile**

Type of provider assisting at last delivery	Per capita consumption quintile					
	Poorest	2	3	4	5	Total
No one	3.19	2.87	2.42	0.61	1.59	2.18
Doctor	3.94	5.21	8.8	15.35	31.04	12.33
Midwife	5.73	8.31	13.74	15.19	17.23	11.75
Nurse	0.48	1.19	0.69	0.94	1.22	0.88
CHW	1.05	1.08	1.93	3.49	2.95	2.05
TBA	33.47	38.97	34.91	31.2	24.59	32.74
Relative/neighbor/friend	51.05	41.6	37.27	33.08	20.75	37.46
Other	1.1	0.77	0.26	0.16	0.64	0.6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Source: 2007/08 NRVA

## DISABILITY AND POVERTY

Afghanistan has gone through war and conflicts for more than two decades; as a consequence, landmines are spread across the country, and conflict and accidents have become the main cause of disability. In addition to conflict as a cause of disability, a poor health care system can also be a cause of disability by failing to prevent certain disease (e.g. polio) which also results in

disability. In recognizing the importance of disability policy and to address the rights and needs of persons with disabilities, Afghan government has drafted National Disability Action Plan 2008-2011 (ANDAP). The findings below can help provide some empirical basis for understanding the extent of disability in Afghanistan, as well as the primary causes.

In order to identify the needs of persons with disabilities, it is important to know the relationship between disability and the socio economic status. This section begins with disability measures and addresses the relationship between poverty and disability on which the national policy on disability can be based or, at least, with which Afghan government can identify the vulnerable population.

Based on the recommendation of Washington Group on Disability Statistics, NRVA 2007-08 included 5 questions asking individual's physical and cognitive functions. Individual responded to 5 difficulty measures (not difficult to incapable of functioning) from which measures of mild and severe disability are constructed. A person is considered to be mildly disabled if he or she scores at least some difficulty in at least one of the 5 measures (vision, hearing, mobility, self care, and remembering), and a person is severely disabled if the respondent experiences a lot of difficulty in at least one of the 5 measures.

**In addition to individual level disability rate, we estimate a household-level disability prevalence rate**, which is based on whether the household has at least one member with a disability. Household-level disability prevalence rate is an important measure to consider since disabled member can add economic and psychological stress to the household through high health care cost and need of cares and economic support from other household members.<sup>37</sup> The basic idea is that the presence of a disabled person in the household affects in some way the life of the other household members. Whereas the individual-level disability estimate informs us as to how many people are disabled in some dimension, the household-level disability rate aims to assess how many people are either directly or indirectly affected by disability.

**5.2 percent of Afghans reported experiencing mild disability which amounts to 1.3 million Afghans**, and 1.6 percent of Afghans reported severe disability which is 400 thousand individuals. More than a quarter of households (28.4 percent) have at least one mildly disabled household member (household level disability prevalence). While only 1.6 percent of Afghans have severe disability, **10.2 percent of households have at least one severely disabled household member**.

**Mild disability prevalence is higher for nonpoor individuals while there is no difference between poor and nonpoor households.** Despite statistically significant difference between poor and nonpoor individual for the case of severe disability, the magnitude of the difference is

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<sup>37</sup> Basu and Foster (1998) suggested new measure of literacy taking into account intrahousehold externality arising from the presence of a literate member. Disability measure shares similarity with literacy measures in terms of intrahousehold externality – disabled household member can generate negative externality.

only 0.2 percent points which is probably not qualitatively meaningful in terms of targeting policies. Severe disability prevalence is higher for poor household than nonpoor household.

**Table 32: Individual and Household Disability Rates by Cause**

	Individual		Household	
	Poor	Nonpoor	Poor	Nonpoor
<b>Mild Disability</b>	4.7 (0.1)	5.6 (0.1)***	28.2 (0.6)	28.5 (0.4)
<b>Severe Disability</b>	1.5 (0.1)	1.7 (0.0)*	10.8 (0.4)	9.9 (0.3)*

*Note:* Standard errors are in parentheses. A statistical difference in mean of prevalence rates between poor and nonpoor is tested. Significance levels based on adjusted Wald test: \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

**The individual-level prevalence rates for severe disability are greater for the nonpoor relative to the poor overall**, and by each cause considered (i.e. conflict, illness, old age);<sup>38</sup> however, the differences are fairly small. In the one case of severe disability caused by old-age, the difference between the poor and nonpoor is both statistically significant and a relatively large difference.<sup>39</sup> This finding also holds for the household-level disability estimates. In all cases, the household disability rates by cause are essentially the same for the poor and nonpoor households, except for the case of old-age as the cause. As with the individual rates, the prevalence of disability caused by old age is greater for the nonpoor than the poor.

<sup>38</sup> In the case of disability due to birth defect, the difference is not statistically significant; but in all other cases the nonpoor individual-level disability is statistically significantly higher than for the poor.

<sup>39</sup> One candidate explanation for this, which we will examine in future analysis, is simply that the nonpoor have a higher probability of living longer and therefore have greater exposure to the possibility of becoming disabled due to old age. Or, in other words, the poor may have a higher probability of dying before becoming old.

**Table 33: Individual and Household Mild Disability Rates by Cause**

	Individual		Household	
	Poor	Nonpoor	Poor	Nonpoor
<b>Conflict/Accident</b>	1.1 (0.0)	1.3 (0.0)***	8.2 (0.4)	8.0 (0.3)
<b>Birth Defect</b>	0.6 (0.0)	0.7 (0.0)	4.4 (0.3)	4.2 (0.2)
<b>Illness</b>	1.6 (0.1)	1.9 (0.0)***	11.4 (0.4)	11.4 (0.3)
<b>Old Age</b>	1.3 (0.1)	1.9 (0.1)***	9.2 (0.4)	10.8 (0.3)***

Note: Mild disability. Standard errors are in parentheses. Statistical differences in mean of prevalence rates between poor and nonpoor are tested. Significance levels based on adjusted Wald test: \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

**In terms of gender difference, conflict caused disability rate for male is double the size for female.** This gender difference is not surprising given war and conflict situation in Afghanistan and male is more affected by conflicts. The pattern of poor and nonpoor differences is largely similar for both genders. Illness-related mild disability rate is higher for nonpoor female than poor female, and old-age related disability rate is higher for nonpoor for both genders. In terms of thinking about gender, disability and policy, it is useful to incorporate the cause of disability. Presumably one candidate explanation for part of the reason why women have a lower prevalence of conflict and accident induced disability is that they are much more rarely outside of the compound. Future analysis will examine this issue.

**Relationship between disability and per-capita consumption appears to have slight U-shape.** The lowest 20 percent has the highest household-level disability rates, both in terms of mild and severe disability. This rate drops for the next 20 percent, and then increases slightly over the consumption distribution. There are no immediate policy implications to this shape, but it does suggest that the poor - nonpoor distinction masks some important differences in disability and consumption-based measures of wellbeing.

**Table 34: Mild Disability Prevalence by Cause, Poverty, Gender**

	Male		Female	
	Poor	Nonpoor	Poor	Nonpoor
<b>Conflict/Accident</b>	1.6 (0.1)	1.8 (0.1)**	0.7 (0.1)	0.8 (0.0)*
<b>Birth Defect</b>	0.8 (0.1)	0.9 (0.0)	0.5 (0.0)	0.5 (0.0)
<b>Illness</b>	1.6 (0.1)	1.7 (0.1)	1.7 (0.1)	2.0 (0.1)***
<b>Old Age</b>	1.4 (0.1)	1.9 (0.1)***	1.3 (0.1)	1.8 (0.1)***

Note: Severe disability. Standard errors are in parentheses. Statistical differences in mean of prevalence rates between poor and nonpoor are tested. Significance levels based on adjusted Wald test: \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

**Table 35: Disability Prevalence by Severity and Consumption Quintile**

		Consumption Quintile				
		1st	2nd	3rd	4th	5th
<b>Individual</b>	Mild	4.9	4.5	5.4	5.6	5.8
		(0.1)	(0.1)	(0.1)	(0.1)	(0.2)***
	Severe	1.8	1.3	1.4	1.7	2.0
		(0.1)	(0.1)	(0.1)	(0.1)	(0.1)***
<b>Household</b>	Mild	30.2	26.9	28.5	28.6	28.0
		(0.8)	(0.7)	(0.8)	(0.8)	(0.8)**
	Severe	12.9	8.8	8.7	9.9	10.8
		(0.6)	(0.5)	(0.5)	(0.5)	(0.5)***

Note: Per capita total consumption (price adjusted). Design-corrected standard errors are in parentheses. Asterisks indicate significance level of test of equal means across consumption quintiles (adjusted Wald tests, \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ).

**Table 36: Mild Disability by Cause and Consumption Quintile**

	Consumption Quintile				
	1st	2nd	3rd	4th	5th
<b>Conflict/Accident</b>	8.5 (0.5)	7.3 (0.4)	8.9 (0.5)	8.1 (0.5)	7.6 (0.5)*
<b>Birth Defect</b>	4.2 (0.3)	4.6 (0.3)	4.0 (0.3)	4.4 (0.4)	4.1 (0.3)
<b>Illness</b>	12.8 (0.6)	10.4 (0.5)	12.6 (0.6)	12.0 (0.6)	9.7 (0.5)***
<b>Old Age</b>	9.7 (0.5)	9.3 (0.5)	9.6 (0.5)	10.7 (0.5)	11.6 (0.6)**

Note: Household-level severe disability by causes. Per capita total consumption (price adjusted). Design-corrected standard errors are in parentheses. Asterisks indicate significance level of test of equal means across consumption quintiles (adjusted Wald tests, \*  $p < 0.10$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ).

The household-level disability measure is important considering that a disabled household member needs economic and mental support from other members and it merits consideration in the discussion of the nation’s disability policy in household-level.

Overall, there is little evidence that the poor are worse off in terms of disability compared to the nonpoor. Even though there are slight decreases in disability rate as consumption goes up, the difference is relatively small. One thing to take into account, however, is that old age related disability increases as consumption increases, which may imply that the poor have low probability of surviving until the old age; therefore, the disability rate is lower for the poor.

Conflict and accident are the leading cause of disability and generate gender disparity in disability. While much policy is already focused on reducing conflict, this finding certainly provides a basis for continued efforts to improve access to health care.

#### **ACCESS TO BASIC SERVICES: CLEAN WATER, ELECTRICITY, SANITATION**

Services like safe water, sanitation, housing, and infrastructure are both correlates of poverty and dimensions of wellbeing. The poor have less access to all, which is another dimension in which they are disadvantaged relative to the nonpoor. Furthermore, they can also affect the earning opportunities and potential of households – current as well as across generations – and therefore contribute to poverty traps. To better understand the nature of poverty, it is therefore important to

assess the constraints the poor face in accessing public services that are critical to enhance their capabilities.

**Access is low for all.** As revealed by the NRVA 2007/08, rates of access to most types of basic services in Afghanistan are low. Only 27 percent of households have access to safe water, 41 percent to electricity and 5 percent have access to sanitary toilet. In all cases, the poor have significantly lower rates of access relative to the nonpoor. For example, 33 percent of the poor have access to electricity, compared with 45 percent for the nonpoor.

**The poor have particularly inferior access to basic services** than the rest of the population. The starkest disparities are in access to sanitary toilet, followed by electricity and safe water (Table 37). Only 23 percent of the poor have access to safe water and only 33 percent are connected to electricity, while as low as 2 percent have access to sanitary toilets. Low access to water and sanitation makes it more likely for the poor to suffer from health problems.

**Table 37: Profile of access to services of the poor**

percent of HH with access to:	Poor	Non-poor	Total
Safe water	23	29	27
Electricity	33	45	41
Sanitary toilet	2	7	5

*Note:* Sanitary toilet: flush and improved latrines; access to community health workers refers to community health workers in village

*Source:* 2007/08 NRVA

**Safe drinking water is critical to welfare of households** and health status of their members. According to UNICEF, one of the main causes of child deaths in the world is diarrhea. Such deaths are preventable by improving access to safe water and sanitation, thus controlling water-borne diseases.<sup>40</sup> In the case of Afghanistan, the NRVA 2007/08 data reveals that households in urban and rural areas have a very different pattern in access to safe drinking water. Sources of safe drinking water in this analysis are hand pump, bored well, protected spring, and pipe water. At the national level, the access in urban areas is substantially higher than in rural areas (58 percent vs. 19 percent). Examining the access pattern vis-à-vis poverty level, the data reveal that the access in urban areas varies dramatically by household welfare level (shown by per capita consumption quintile, Table 38). In rural areas, access to safe water is essentially the same for the poor and nonpoor (ranging from 18 to 21 percent). This would suggest that access in rural areas is primarily a supply side issue. In contrast in urban areas, there is significant variation in

<sup>40</sup> <http://www.unicef.org/mdg/childmortality.html>

access to safe water by consumption quintile. For the bottom 20 percent, an estimated 39 percent of the population has access to safe water. This increases for each quintile, reaching a maximum level of 66 percent for the top quintile in urban areas.

**Table 38: Access to safe drinking water (% of households) by quintile**

PC quintile	Urban	Rural	Total
1 (poorest)	39	18	19
2	40	18	19
3	48	19	22
4	49	20	26
5 (richest)	66	21	43
<b>Total</b>	<b>58</b>	<b>19</b>	<b>27</b>

*Note: Household weights used.*

*Source: 2007/08 NRVA*

**The poor spend more time collecting water.** Examining the travel time to water sources complements the knowledge about poverty and access to safe drinking water. This aspect of access to water is particularly important in rural areas where water sources may not be located within the compound and residents need to spend a significant amount of time collecting water. In the case of Afghanistan, the NRVA data show that there is a large difference between travel time to water sources in rural and urban areas. On average, households in rural areas spend about 9 minutes on a one-way walk to the water sources, while their urban counterparts only spend about 2 minutes (Table 39). The travel time also varies by per capita consumption. Households at the lower end of welfare distribution tend to spend more time traveling to water sources.

Since water collection is usually performed by women; travel time to water sources can affect women's activities and participation in the labor market. Research from rural Pakistan showed that an improvement in water supply infrastructure cuts down women's time used to fetch water, and therefore, women increase the time allocating for income-generating activities (Ilahi and Grimard, 2000).

**Table 39: Avg. travel time to water source (minutes)**

PC quintile	Urban	Rural
1 (poorest)	3.6	10.6
2	2.8	11.1
3	2.8	9.2
4	2.2	7.8
5 (richest)	1.5	7
<b>Total</b>	<b>2.0</b>	<b>9.3</b>

Source: 2007/08 NRVA

**The data show immense shortfall in access to improved sanitation.** Overall, only 5 percent of households in Afghanistan use improved sanitation facilities. Table 40 also shows a stark contrast in toilet availability between urban and rural areas. Almost none of the households in rural areas use any sanitary toilet facilities. Utilization of sanitary toilets in urban areas varies tremendously by the household’s poverty level, ranging from three percent in the poorest consumption quintile to 28 percent in the richest quintile. Even when considering the rate of access among the richest quintile, the figures are still low, at 28 percent in urban areas and at 2.4 percent in rural areas. This suggests that lack of toilets may not be exclusively related to lack of means, but may also reflect other factors like lack of awareness about sanitary practices.

**Table 40: Access to improved sanitation**

PC quintile	Urban	Rural	Total
1 (poorest)	2.9	0.5	0.6
2	8.0	0.6	1.1
3	5.1	0.8	1.3
4	14.0	1.5	4.3
5 (richest)	28.4	2.4	15.0
<b>Total</b>	<b>20.5</b>	<b>1.1</b>	<b>4.9</b>

Note: Types of toilet that are considered improved sanitation are ‘improved latrine’ and ‘flush latrine’.

Source: 2007/08 NRVA

**Access to electricity is more widespread than other basic services.** Access is defined if a household “has electricity from any source”<sup>41</sup> in the 30 days prior to the time of interview. With this definition, the NRVA data show that as many as 41 percent of households in Afghanistan have access to electricity (Table 41). As expected, access to electricity is lower in rural areas where only 29 percent of households have electricity. Similar to other types of basic services,

<sup>41</sup> Options of sources of electricity in the questionnaire are: Electric grid, government generator, personal generator (engine and hydro), community generator (engine and hydro), solar, wind, and battery.

access to electricity is higher among households in richer quintiles. In rural areas, the rates of access range from 22 percent in the first quintile to 34 percent in the fifth quintile.

**Table 41: Access to electricity (any source)**

<b>PC quintile</b>	<b>Urban</b>	<b>Rural</b>	<b>Total</b>
1 (poorest)	70	22	23
2	76	28	31
3	83	31	37
4	88	32	45
5 (richest)	94	34	63
<b>Total</b>	<b>90</b>	<b>29</b>	<b>41</b>

*Source:* 2007/08 NRVA

## V. TRENDS IN WELLBEING: NRVA 2005, 2007, 2007/08 COMPARISONS

The earlier section shows poverty estimation based on NRVA 2007/08. That analysis tells us the current poverty situation in Afghanistan; it fully utilizes all information from the latest survey. It is important to highlight that the poverty number from two exercises are NOT comparable. Although the estimations were done based on the same procedures, the questionnaires and methodological details differed across the years. Therefore, it is not possible to make any credible reference as to whether the poverty rate of 36 percent from NRVA 2007/08 is higher or lower than the 33 percent from NRVA summer 2005 or the 42 percent from NRVA spring 2007.

**There are two key issues for why the current estimate of 36 percent poverty rate is not comparable with the estimates from the previous NRVA years.**

**First, there is large seasonal variation in poverty status in Afghanistan, which is not accounted for in either of the two previous estimates.** As shown in Table 7, poverty in Afghanistan is subject to strong seasonal fluctuations. The 36 percent poverty estimate originating from NRVA 2007/08 provides a seasonally smoothed estimation of poverty throughout the year. On the contrary, earlier waves of the household survey covered a single season only, being respectively summer for NRVA 2005 and spring for NRVA 2007. As a result, direct comparison of poverty rates across these surveys would totally misrepresent trends in wellbeing.

**The second issue which prevents poverty comparisons over the years is that the survey itself changed.** Poverty is estimated from the responses to hundreds of questions about how much people have consumed of different food and nonfood items. The sum of the responses to all of these questions is used to define a total level of consumption, and this level of consumption is used to assess poverty. In the case of the NRVA 2007/08 more of both food and nonfood items were added to the list of questions. Logic and research indicates that when more questions are asked about what someone has consumed, the resulting value of consumption increases (e.g. Jolliffe, 2001). In this case then, one would observe that over time total consumption is increasing, but it is completely possible that this increase in value could be due to the increased number of questions (and not reflect a true increase in total consumption).

**While it is not possible to make comparisons of poverty over time, this section discusses different approaches and methodological steps that allow us to make some limited inferences about trends of household welfare in Afghanistan between 2005 and 2008.** Since a large number of similar food items appear in both rounds of the NRVAs, we use food expenditure and food poverty to compare the change in wellbeing between 2005 and 2007/08. Per capita consumption of these food items will be a basis of the welfare trends analysis. Additionally, caloric intake, self-reported changes in food sufficiency and changes in other

“objective” socioeconomic indicators will also be used to corroborate the results from trends of food poverty.

## COMPARABILITY ISSUES

The main reason that the poverty rates from NRVA 2005 and NRVA 2007/08 are not comparable is that both the food consumption and nonfood questionnaires changed. More consumption items were added to the NRVA 2007/08 questionnaire in order to capture a wider variety of food and non-food expenditures and to provide improved input to national account data. (The number of items added is a compromise between requests from national account and CPI purposes and the size of NRVA questionnaire.) A disadvantage to these changes though is that the comparability of poverty estimation between NRVA 2005 and NRVA 2007/08 was compromised.

### Comparability of consumption expenditures

The evolution of NRVA questionnaire from the 2005 round to the 2007/08 round is shown in Table 42. While maintaining the same questionnaire format, the consumption module was expanded in the last round, increasing the number of food items from 64 to 91 items. Research has shown that increasing the number of prompts in questionnaires, increases the value of responses, which corrupts comparisons over time.<sup>42</sup> The change in the non-food consumption component of the questionnaire, in contrast, was much more drastic. As a result, only 1 out of 11 nonfood items is similar. For this reason, we assert that nonfood expenditures between the two rounds of NRVA are not comparable. The analysis of comparable consumption expenditure will therefore focus on food expenditures.

**Table 42: Evolution of NRVAs**

	NRVA 2005	NRVA 2007 /08
Sample size: number of households (approx.)	30,000	21,000
Number of food items	64	91
Number of non-food items	13	41

*Source:* NRVA 2005; 2007/08

<sup>42</sup> Jolliffe (2001) illustrates that the addition of questions significantly affects estimates of household consumption and absolute poverty. In a between-groups designed experiment in El Salvador, longer, more detailed questions on consumption result in an estimate of mean, household consumption that is 31 percent greater than the estimate derived from a condensed version of the questionnaire. The distribution of household consumption from the long questionnaire first-order stochastically dominates the distribution from the short questionnaire over 96 percent of the range of the distribution.

A detailed comparison of food consumption of NRVA 2005 and 2007/08 reveals that the food consumption questionnaires have significant overlap, and the overlapping food expenditures are potentially comparable. We construct our bundle of comparable food items by using those items that are in both NRVA 2005 and NRVA 2007/08, and we include two new disaggregated items—curd and powdered milk—that would have been covered under the 2005 list (under yoghurt and milk). This comparable list accounts for all of food expenditure in 2005 and 88 percent of household food expenditure in 2007/08, a sizable portion of household food expenditures.

A few minor issues on the construction of the comparable consumption expenditure that need to be documented are: (i) The NRVA 2007/08 adds to each group a response for “others” similar foods. The expenditures listed under this heading are small (0.5 percent of food expenditure), and we expect them to have little effect on reporting of actual items. (ii) Fresh apricot is not included in the comparable item of 2007/08, but is a part of the food consumption from 2005. The NRVA 2007/08 questionnaire does not contain fresh apricot in the food section. However, this accounts for a small fraction of food expenditures, only 0.7 percent of food expenditure in 2005. Since the proportion of apricot to total food expenditure is minute, it does not necessarily necessitate an adjustment. (iii) Disaggregation. Two items were broken down from the earlier items—milk (2005) to fresh milk and powder milk (2007), and yoghurt in 2005 to yoghurt and curd (2007). Even though one would expect “milk” (as prompted in 2005) to include “fresh milk” and “powder milk” (as prompted in 2007/08), field tests suggest that the additional prompts in 2007/08 will result in higher reported values (see above). While there is no clear method for handling this concern,

Table 43 indicates that while milk and yoghurt represent a large part of diet, the inclusion or exclusion of powder milk and curd is expected to have little effect on the comparison due to their relative expenditures. Our choice was to treat powdered milk and curd as being included in 2005 (when asked about milk and yoghurt) and include them in the comparable consumption expenditure in 2007/08.

**Table 43: Percentage of food expenditures: Select items**

Food Item	2007/08		2005
	Whole year	Summer	Summer
Milk	3.28	3.80	3.31
Powdered Milk	0.17	0.12	
Yogurt	2.48	2.98	3.00
Curd (chaka*)	0.36	0.50	

Note: \*drained yoghurt

Source: NRVA 2005; 2007/08

## Method for Price Adjustment of the Consumption Aggregates

To derive poverty rates in 2007, we compare the 2007 *comparable consumption expenditure* with the 2007 poverty line. The poverty line for spring 2007 is based on the poverty line created for the summer 2005 sample, and adjusted for the change in prices between summer 2005 and spring 2007. We similarly use an inter-temporal price index (IPI) to scale up the spring 2007 poverty line to spring 2008. After adjusting for the change in prices over time, we also adjust for spatial price differences.

### INTER-TEMPORAL PRICE ADJUSTMENT

The inter-temporal price index is calculated using prices extracted from the district price survey and weights derived from the NRVA household surveys. District price data are used, and thus the collection of prices does not rely on unit value prices derived from actual expenditures. As a result, actual prices exist for all items which allows for the use of the Tornqvist price index.

#### Box 1: Tornqvist Index definition

The Tornqvist index for food consumption, is defined as

$$\ln P_{10}^T = \sum_{j=1}^n \frac{w_{1j} + w_{0j}}{2} \ln \left( \frac{p_{1j}}{p_{0j}} \right),$$
 where  $P_{10}^T$  denotes the Tornqvist price index;  $1$  and  $0$  denote the

two years of comparison,  $w_{1j}$  and  $w_{0j}$  are the respective budget shares, and  $p_{1j}$  and  $p_{0j}$  are the respective prices for good  $j$  in the two years of comparison. To take into account possible changes in the consumption bundle in response to price changes or changes in the consumption pattern, the Tornqvist index uses the average of the weights in the base and final periods as the weight of every commodity  $j$ .

The weights for this index are based from reported expenditures in the two time periods. The index is calculated with all the food items for which price data was available in summer 2005 (63 items are used). It should be emphasized that the index is based only on food prices. The Tornqvist price index between spring 2007 and spring 2008 is calculated to be 1.50, implying 50 percent increase in food price according to the survey-based price index. This figure is very similar to the year-on-year food CPI of Afghanistan of 53 percent. We use the survey-based price index because it collects data from all areas of the country—both urban and rural—while the CPI only collected data from 6 major cities.

**Spatial price adjustment.** Using the intertemporal price index, the poverty line from spring 2007 is inflated to the price-level of spring 2008. However, this poverty line is anchored at the

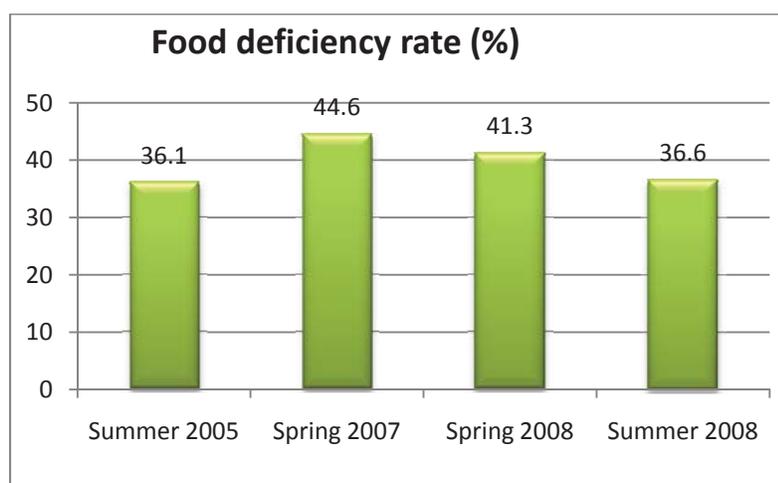
national average price. In order to estimate a comparable measure based on the inflated food poverty line, we follow the same methodology as used with the summer 2005 and spring 2007 estimates. In particular, we account for spatial variation in prices. To do this, we adjust the nominal-values of consumption from quarter 3 in the NRVA 2007/08 data based on the following spatial deflator:  $S_{ki} = \frac{R_{ki}}{\sum_i \sum_k R_{ki} w_i / \sum w_i}$ , where  $R_{ki}$  is the regional price index for region  $k$ , household  $i$ , and  $w_i$  is the associated weight. The index  $R$  is the price index used in the NRVA 2007/08 analysis and is benchmarked to quarter 1, region 1. In our first step, we restrict the numerator and denominator of this deflator to the spring of 2008. In order to de-link this index from region 1, we construct an estimate of the national price index in the denominator (the weighted average of the regional price index in spring 2008). This is the denominator. The deflator  $S$  then informs how prices vary across regions in spring 2008, relative to the national price index. We repeat this process to examine summer 2008, but the numerator in this case is based on the regional index values for summer 2008.

## FOOD DEFICIENCY RATES

At this point, we have constructed a comparable food bundle across summer 2005, spring 2007, spring 2008 and summer 2008. The food poverty line from spring 2007 (which is based on the food poverty line for summer 2005) has been adjusted for overall inflation between spring 2007 and the last two quarters of the NRVA 2007/08 (summer and spring 2008). The nominal values for expenditure on the comparable food items in the NRVA 2007/08 have also been adjusted for spatial price differences in a manner similar to the analysis carried out in the earlier rounds of the NRVA.

These inputs allow us to now produce welfare comparisons in the consumption levels of comparable food items between the earlier NRVA estimates and the NRVA 2007/08. We emphasize that this is not a comparison of poverty over time. The minimum bundle of food and nonfood items that define poverty in 2007/08 is markedly larger than this bundle of 63 food items. Nonetheless, this measure provides us with a comparable bundle and threshold over time. We will refer to households whose expenditure on this comparable bundle is less than the (temporally-adjusted) threshold as “*food deficient*”. In general, this rate is comparable to the food poverty rate estimated earlier in the NRVA 2005 series, but it is not comparable to the food poverty rate estimated from the 2007/08 NRVA. Results are shown in Figure 10.

**Figure 10: Trends in food deficiency**



Source: NRVA 2005; 2007/08

The analysis shows that food deficiency estimates have not changed much between 2005 and 2008. It is evident that seasonality greatly affects poverty and welfare in Afghanistan. To appropriately account for seasonality, the comparison of trends in food deficiency is sensible only between those from the same season. Between the two rounds of NRVA, there are two pairs of seasons that we can draw inference on food deficiency trends—(i) summer 2005 and 2008 and (ii) spring 2007 and 2008.

**Table 44: Food Deficiency Trends, Season-on-season Change**

<i>Time period</i>	<i>Food deficiency rate (%)</i>	<i>95 percent C.I.</i>
<b>Summer 2005</b>	36.1	[34.9 - 37.2]
<b>Summer 2008</b>	36.6	[34.7 - 38.5]
<b>Spring 2007</b>	44.6	[39.4 - 49.8]
<b>Spring 2008</b>	41.3	[39.0 - 43.6]

Source: NRVA 2005; 2007/08

The point estimates of food deficiency rate from summer 2005 and summer 2008 are at 36 percent and 37 percent respectively. These point estimates are very close in magnitude; they are, statistically indistinguishable given the confidence interval reported in Table 44. Similarly, although the point estimate of the food deficiency rate in spring 2008 is better than in spring 2007 (41 percent vs. 45 percent), this difference is not statistically significant. However, the estimates show a clear pattern of welfare between spring and summer: Afghan people are better off in terms of food deficiency in the summer than in the spring.

**How can we explain this welfare trend?** Anecdotal evidence reveals that the summer of 2005 was a bumper crop in Afghanistan, while most households were affected by a major food price crisis in the early half of 2008. Considering just these two events, one would expect the food deficiency rate to be much higher in 2008 relative to 2005. Given that it is approximately unchanged, one candidate explanation is that the poverty reduction efforts have made important headway in Afghanistan. Given the large increase in food prices observed during the spring and summer of 2008, one might expect this to produce a large deterioration in food sufficiency, wiping out (perhaps temporarily) the gains from poverty reduction policies. A more complete analysis of this issue can shed some light on the validity of this proposed explanation.

## SUBJECTIVE ASSESSMENT OF WELLBEING

In recent years, there has been an increasing use of subjective welfare measures, in which respondents self-report their household's welfare level, offering personal assessments of living standards. These data are subjective in nature but can be useful when we examine them over time, and when compared with objective measures such as caloric intake or poverty status. Such information can inform our understanding of trends in wellbeing in Afghanistan.

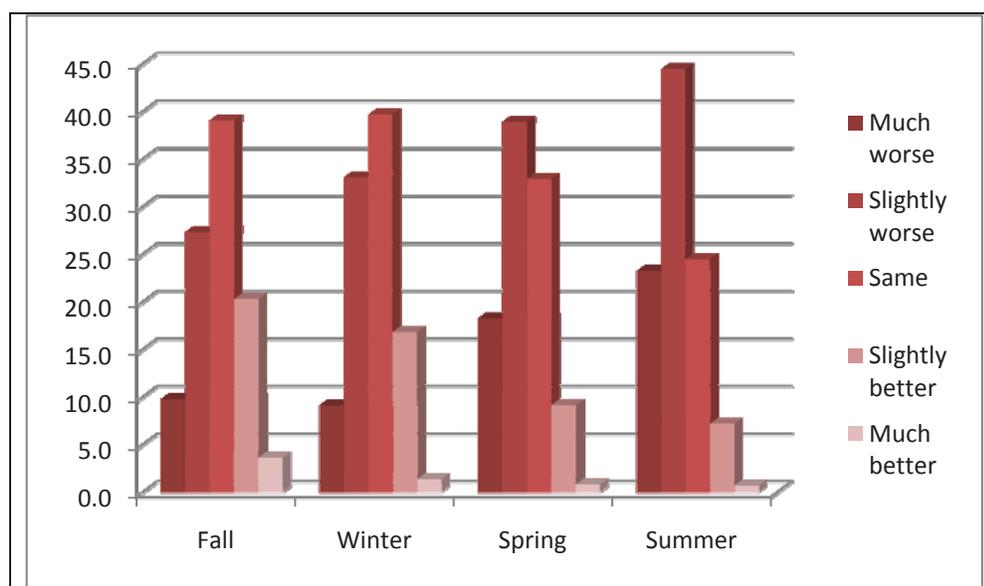
**The NRVA instrument includes some subjective assessments of wellbeing.** In addition to fielding the survey on a year round basis to capture effects of seasonality, the NRVA also collect subjective information from male and female respondents about the overall economic situation and food sufficiency. Respondents are asked to compare their current status with the situation a year ago on two dimensions: (a) overall economic situation and (b) household's ability to satisfy food needs.

**Table 45: Subjective Evaluation of Problems in Meeting Food Needs**

<i>Frequency of Difficulty in Meeting Household Food Needs</i>	<i>Spring 2007</i>	<i>Spring 2008</i>	<i>Spring 2007</i>	<i>Spring 2008</i>
	<i>Male Respondent</i>		<i>Female Respondent</i>	
<i>Never</i>	24.5	40.8	18.8	27.0
<i>Rarely (1 to 3 times)</i>	39.4	35.4	36.7	33.1
<i>Sometimes (4 to 6 times)</i>	27.0	18.4	32.5	25.3
<i>Often (a few times every month)</i>	7.0	4.1	8.2	8.8
<i>Mostly (this happens a lot)</i>	2.2	1.5	3.9	5.7

*Sources:* NRVA 2007 and NRVA 2007/08

**Figure 11: Comparison of HH's economic situation with last year  
(Male response from NRVA 2007/08)**



Source: 2007/08 NRVA

**Table 46: Subjective evaluation of HH's overall economic situation compared with last year**

	Male		Female	
	Spring 2007	Spring 2008	Spring 2007	Spring 2008
<i>Much worse</i>	14.5	18.3	14.9	18.1
<i>Slightly worse</i>	41.6	38.9	41.3	39.3
<i>Same</i>	32.4	32.9	32.3	27.5
<i>Slightly better</i>	10.8	9.1	10.6	14.2
<i>Much better</i>	0.8	0.8	0.9	0.9

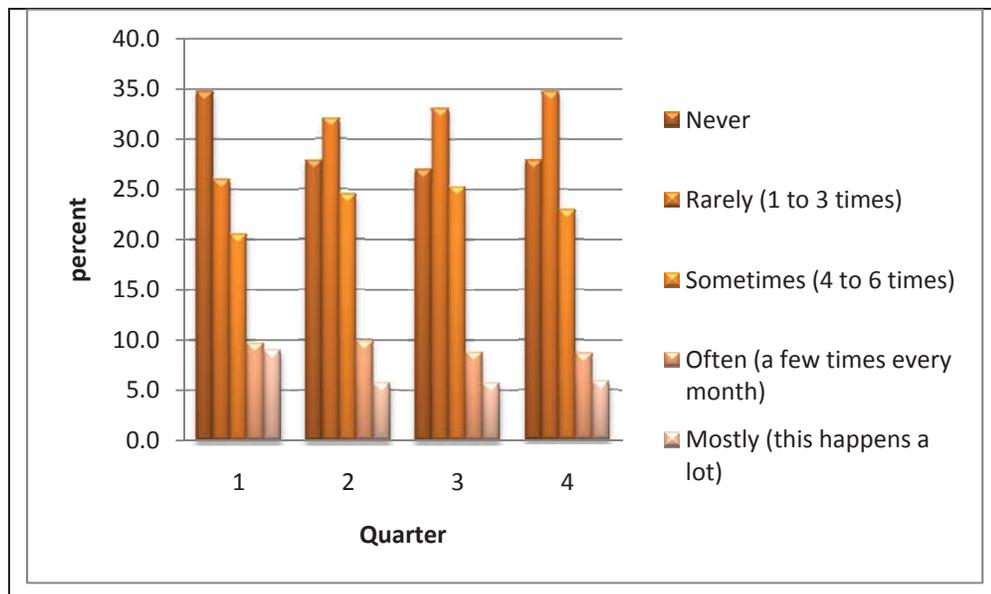
Sources: NRVA 2007 and NRVA 2007/08

**Perception of economic situation deteriorated from mid 2007 to mid 2008.** Figure 11 shows households' evaluation of their overall economic situation at the time of the survey and the same period a year ago. The same question was used to interview both male and female respondents during the field survey, and the pattern of the responses was remarkably similar (See Table 46 for male-female comparison, Figure 11 presents only evaluation of male respondents). The data show that, compared to the previous year, economic situation deteriorated steadily. During the first half of the year, a large majority of respondents stated that their overall economic situation was either the same or better than last year. But, in the latter half of the year, when the food-price

crisis struck, the assessment changed quite significantly – the majority then felt that things had become worse relative to last year. For example, the percentage of respondents who described their situation as worse than the same period last year (combining “much worse” and “slightly worse”) increased from 37 percent in fall 2007 to 57 percent in spring 2008 and to as high as 69 percent in summer 2008. The widening gap of opinion is certainly consistent with the suggestion that the impact of food-price crisis was quite severe.

The NRVA series also fielded another survey in spring 2007 and this data enables us to make the comparison for a longer horizon. In order to compare answers across the two instruments, it’s useful to restrict the NRVA2007/08 sample to precisely the same time period as the small-sample NRVA 2007. The data indicate that the evaluation of overall wellbeing in spring of 2008 is slightly worse than (or relatively similar to) in spring of 2007; among male respondents, there are about an additional four percent of households who feel that the situation is much worse than a year ago.<sup>43</sup>

**Figure 12: Problems meeting HH food needs (female self-report)**



Source: 2007/08 NRVA

**Ability to meet food needs deteriorated during the food-price crisis.** Response from the female questionnaire about the ability of the household to meet their food needs during the last year deteriorated during the field work of the NRVA 2007/08 (Figure 12). This change is largely

<sup>43</sup> The patterns of opinion are similar between those of male and female respondents.

seen in a decline in households that never had food problems – from 35 percent in quarter 1 to about 27 percent in quarters 3 and 4. This decline was mirrored by an increase in those who had problems “rarely” and “sometimes” over that same time period.

**Table 47: Subjective Evaluation of Problems in Meeting household food needs last year**

	Male		Female	
	Spring 2007	Spring 2008	Spring 2007	Spring 2008
<i>Never</i>	24.5	40.8	18.8	27.0
<i>Rarely (1 to 3 times)</i>	39.4	35.4	36.7	33.1
<i>Sometimes (4 to 6 times)</i>	27.0	18.4	32.5	25.3
<i>Often (a few times every month)</i>	7.0	4.1	8.2	8.8
<i>Mostly (this happens a lot)</i>	2.2	1.5	3.9	5.7

Sources: NRVA 2007 and NRVA 2007/08

**Ability to meet food needs appears to be improving from year to year.** Another question that was asked of both males and females in both the 2007 and 2007/08 NRVA was whether the household had problems meeting their food needs in the last year (Table 47). In contrast to the assessment of the overall economic situation, the male and female responses to this question diverged quite significantly. For example, in spring 2008, the 41 percent of males stated that they never had problems meeting the food needs of the household. When women were asked the same question, only 27 percent stated that they never had problems meeting food needs. In assessing the trend over time though, both the male and female responses appear to indicate improvement. According to men in 2007, 25 percent of households never had food problems, and this increased to 41 percent in spring 2008. According to women in 2006, 19 percent of households never had food problems and this increased to 27 percent in spring 2008. The overall levels are very different between men and women, but both appear to indicate improvement over time.

## OBJECTIVE ASSESSMENT OF WELLBEING

**In spite of the mixed picture emerging from trends in food deficiency and subjective wellbeing, data show a significant improvement in several education and health indicators during 2005-07/08.** The analysis of socioeconomic indicators whose definition has remained stable over time provides further (and perhaps more robust) insights into understanding the trends in well being of Afghan households. Both 2005 and 2007/08 survey instrument allow constructing comparable enrollment and literacy rates for education as well as immunization

rates for health. For instance, Table 48 show that enrollment rates for primary school children (aged 6 to 9) has increased nationwide by about 40 percent (10 percentage points increase) between 2005 and 2007/08, whereas the percentage of the young adult population (aged 15 to 24) who are literate increased from 31 to 37.6 percent (Table 49). Similarly, Table 50 shows consistent improvements over the same period in vaccination rates of infants.

**Improvements over time in education outcomes have not been homogeneous across gender and areas of residence.** These improvements in educational indicators despite mixed trends on poverty are indicative of a measure of success of public policy towards education. However, gender and area of residence are relevant dimensions in evaluate the pace of such progresses, possibly suggesting that cultural factors and access to services in more remote areas sill constraint the achievement of better education outcomes.

**Table 48: Trends in Education: Children (6-9 years) enrolled and attending school (%)**

	Female		Male		Total	
	2005	2007/08	2005	2007/08	2005	2007/08
<b>Urban</b>	34.7	47.2	34.9	53.4	34.8	50.3
<b>Rural</b>	20.1	27.4	28.8	40.5	24.6	34.1
<b>Kuchi</b>	5	7.7	5.8	14.7	5.4	11.4
<b>National</b>	21.2	28.9	28.4	40.6	24.9	34.9

Sources: NRVA 2005 and NRVA 2007/08

**Table 49: Trends in Literacy rates (individuals aged 15 to 24)**

	Female		Male		Total	
	2005	2007/08	2005	2007/08	2005	2007/08
<b>Urban</b>	55	52.6	70.3	74	63.3	63.6
<b>Rural</b>	11.7	15.7	35.8	48.4	25.7	32.9
<b>Kuchi</b>	5.6	6.2	6.1	15.8	5.9	11.6
<b>National</b>	<b>19</b>	<b>22.4</b>	<b>39.8</b>	<b>51.3</b>	<b>31</b>	<b>37.6</b>

Sources: NRVA 2005 and NRVA 2007/08

**Table 50: Trends in Health: Vaccination rate (%) of children (13-24 months)**

	<b>NRVA 2005</b>	<b>NRVA 2007/08</b>
<b>BCG</b>	60	74
<b>Polio</b>	48	71
<b>DPT</b>	17	43
<b>Measles</b>	53	56
<b>Full Immunization</b>	11	37

*Sources: NRVA 2005 and NRVA 2007/08*

## VI. CONCLUDING COMMENT

Due to the successful initiative to collect the NRVA 2007/08 data in all provinces of Afghanistan, throughout the calendar year, this report is able to provide many details on how poverty affects the population. None of this would have been possible without the active engagement and leadership of the Central Statistics Organization and the Ministry of Rural Rehabilitation and Development in collecting the data under extremely difficult circumstances. The development of this report and the poverty estimates relied heavily on the leadership of the Ministry of Economy and the inter-Ministry Poverty Estimates Technical Committee (PETC). Finally, also key to this report was the financial and technical support from donors, including the European Union, World Food Programme, UK Department for International Development, Asian Development Bank, and the World Bank.

This report describes the multidimensional nature of poverty by encompassing the nonmonetary dimensions of poverty, particularly education and health status, and vulnerability to shocks. Tables in the report are also disaggregated by region, income sources, gender, and many socio-economic characteristics. In addition to providing a picture of the many dimensions of poverty, it is important to also recognize that the poverty estimates in this report are the first nationally representative, seasonally smoothed estimates of wellbeing for Afghanistan. One important message of the analysis of change over time is that there is evidence of improvement in specific, objective measures of wellbeing, such as education and health. Because previously there had been no such existing estimates available, the provision of these estimates substantially fills key knowledge gaps in our understanding of the poverty situation in Afghanistan.

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## ANNEX 1: PROVINCE POVERTY RATES, CATEGORIES

<b>Province</b>	<b>Poverty Category</b>
Helmand	Lowest, less than 20%
Farah	Lowest, less than 20%
Jawzjan	Lowest, less than 20%
Baghlan	Lowest, less than 20%
Parwan	Lowest, less than 20%
Ghazni	Lowest, less than 20%
Kapisa	20-30%
Panjshir	20-30%
Kandahar	20-30%
Kabul	20-30%
Nimroz	20-30%
Sar-I-Pul	20-30%
Faryab	20-30%
Kunduz	20-30%
Nangarhar	31-42%
Takhar	31-42%
Zabul	31-42%
Herat	31-42%
Uruzgan	31-42%
Badghis	31-42%
Daykundi	43-57%
Ghor	43-57%
Khost	43-57%
Nooristan	43-57%
Samangan	43-57%
Bamyan	43-57%
Wardak	Highest, more than 57%
Balkh	Highest, more than 57%
Paktya	Highest, more than 57%
Badakhshan	Highest, more than 57%
Kunarha	Highest, more than 57%
Laghman	Highest, more than 57%
Logar	Highest, more than 57%
Paktika	Highest, more than 57%

*Note:* The five categories indicate varying poverty rates.

