

## OVERVIEW OF PROJECT AFFECTED POPULATIONS

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## 4 OVERVIEW OF PROJECT AFFECTED POPULATIONS

### 4.1 INTRODUCTION

Data to support formulation of the RAP for the BTC pipeline construction in Georgia were collected in several ways. First, a census based on the parcels of land within a 522 meter corridor (per HGA) was conducted. This data, together with information on the ownership patterns of all affected plots, was incorporated into the Geographical Information System (GIS). Second, a ten percent initial sample of GIS census subjects was randomly drawn to form the sample for a socio-economic RAP survey aimed at uncovering the characteristics of Project Affected Populations (PAPs). This survey was implemented in April-May 2002. The significant route changes that occurred during the conduct of this original RAP survey required the preparation of a RAP survey up-date. Thus, a second sample of 450 plots drawn from the up-dated GIS census of October was surveyed in October 2002 to build and improve upon the lessons learned from the previous RAP survey. The results of these two surveys have enabled evaluation of the nature and magnitude of potential impacts that implementation of the BTC pipeline project will have. These larger survey results are complemented with findings derived from a series of smaller surveys that were implemented between September-October, 2002. Subjects for the smaller studies included relatives of absentee owners, disproportionately affected PAPs, absentee owners living in Tbilisi and Sakrebulo administrators. Table 4.1 details these.

**Table 4.1 Surveys Undertaken for the RAP**

Survey	Completion Date
Initial RAP Survey	May 2002
RAP Survey Update	October 2002
Survey of absentee owners	October 2002
Survey of Sakrebulos	October 2002
Semi-structured interviews with PAPs	October 2002
Semi-structured interviews with users of State owned lands	October 2002
Qualitative survey of enterprises	October 2002
Semi-structured surveys with elderly women	October 2002
Semi-structured surveys for the utilization of RAP Fund and individual compensation	October 2002
Semi-structured interviews with different ethnic groups (Azeri, Georgian, and Greek communities)	October 2002
Community and local administration interviews on Sakrebulo-administered communal land use	October 2002
Large number of in-depth interviews complementing the above	May – October 2002

The aim of the RAP is to provide guidelines for minimizing the adverse impacts that construction of the BTC pipeline may have on the designated land and the people who use that land. More specifically, the role of the RAP is to present an accurate and comprehensive portrayal of the losses to be incurred by PAPs and, conjointly, to make recommendations for fair restitution to each affected landowner and land user. Determining what is “fair” will not only be a function of

economic assessment, but also of socio-political factors that may influence the ultimate fairness of compensation schemes.

Specifically, the surveys (henceforth referred to as “RAP surveys”) aimed at obtaining and quantifying information on types of land ownership (single and multiple); characteristics of the land plots themselves; economic characteristics of landowners and users; compensation issues and expectations (including any unrealistic expectations); and future plans for use of project affected lands.

The socio-economic RAP survey results have shed light on many commonly held concerns, requests, and misperceptions, among persons who live and work in the immediate path and proximity of the eventual pipeline. The data yielded by these two surveys have been analyzed and summarized. In most cases, the updated data from the survey implemented in October 2002 have been used. Nonetheless, in the few cases where the May 2002 survey returned more detailed data, this data has been presented and identified accordingly. The resulting information is presented throughout this report and provides input for the formulation of BTC project planning, communications, and compensation activities.

## **4.2 SUMMARY OF SOCIO ECONOMIC SURVEY RESULTS**

### **4.2.1 Methodology and Sampling**

The October RAP survey methodology is based on standardized systematic interviews with landowners and land users whose plots of land will be affected by the BTC project. The sampling covered interviews with owners or caretakers of 450 plots. Survey teams were provided with a backup list of parcel owners (owners of alternate plots) in case they could not find the initially targeted landowner or land user.

The RAP survey included special sections aimed at obtaining information about absentee owners, and households that would be disproportionately affected due to land acquisition since they may lose more than 30 percent of their land. The main part of the survey was administered to landowners, including those who may lose a substantial portion of their land, while the absentee owners section was administered to those who were taking care of an affected plot in the owners’ absence.

### **4.2.2 General Findings**

- PAPs are predominantly agricultural (farmers), geographically stable (non-migrant), literate persons of limited economic means, deriving a significant part of their income from self-consumption of produce from items grown on private garden plots and household-owned agricultural land.
- Two thirds of land plots to be affected by the project are in the Southwest region (Samtskhe-Javakheti); one third are in the Southeast region (Kvemo Kartli).

- According to the RAP survey sample of 450 plots, the owners of about 83 percent of the affected plots reside in their respective localities, while 17 percent of the owners are absentees.
- Ninety-six percent of affected land users own the affected plot themselves, while four percent have joint ownership with other people, mostly their close relatives.
- A separate absentee owners survey found that not all absentee owners would be willing to sell their land; it may become necessary in these cases to use the legal right of eminent domain for expropriation.
- Among the October RAP survey respondents who are landowners, 68 percent are male and 32 percent are female. The largest percentages of female landowners are in Gardabani district, the majority of these females are older than 50.
- The impacts of the pipeline corridor will be minimal with respect to physical resettlement. Only 6 affected plots out of 450 had dwellings located on them. Projected to the total number of plots, this amounts to 40 dwellings in total. None of these dwellings will be impacted by the 44 or 58-meter corridors.
- Most households (86 percent) have a garden plot adjacent to their house, which is used for gardening and self-consumption. Improvements in these plots are likely to directly improve the real income levels of affected households.
- Land-based income constitutes most of the total income for all districts except Gardabani and Tetrtskaro; hence dependence on the land plot is very high, particularly in rural areas.
- The land that will be acquired for the BTC project is predominantly crop and pasture land, although a minor portion of the affected plots also have productive trees on them.
- Project affected plots are used heavily by families; about 83 percent of the respondents cultivate their land with their families, while 8 percent cultivate it by themselves.
- Total annual average household cash income of affected households is 4,128 GEL, or about US\$ 2,064. When one divides this GEL by the average number of household members (4.3) it appears that the average income of each household member is 960 GEL per year, or about US\$1 per day. The level of self-consumption is estimated roughly at 758 GEL/year/household or about 176 GEL/year/capita. The affected people are at a poverty level in terms of their cash incomes, and the only difference between them and a higher level of poverty is the consumption of items that they produce (at least partially) on the affected land.
- Because agriculture comprises over 60 percent of the cash income of PAPs, disruption of farming during project construction may have a significant effect on affected families. The effects should not persist after the right-of-way (ROW) is restored since the large majority of crops are shallow-rooted, which can be grown on the ROW after restoration.

- For many, the project will impact a relatively large segment of their land; consequently, cash compensation alone may be inadequate to restore and improve livelihoods.
- Over 90 percent of PAPs raise livestock, which commonly depend on community-used (Sakrebulo) and other State-owned lands for grazing. If project construction restricts access to these lands, PAPs could be harmed. The impacts would be most significant during construction, and modest to minor thereafter.
- The majority of the October RAP survey respondents (89 percent) use community-used state pastures during the year to feed their livestock.
- Potential impacts of the project are not differentiated along ethnic lines; Greek households, comprising about 11 percent of the PAP households (the rest are 69 percent Georgian and 19 percent Armenian), stand to lose more total land but, because they have more land, the proportion is equivalent to that of other ethnicities.
- Roughly 62 percent of PAPs have concerns about the project's effects on the forest. Many of these concerns seem to be the result of misunderstandings. Thirty-five percent are concerned seriously about decreased access to firewood, which is a crucial source of heat in winter months.
- On average, the project will acquire between 19 and 52 percent of individual plots. Most households have additional land plots that they use for cultivation.
- It is estimated that, on average, affected households would lose 11 percent of their income due to the impacts of the project, although this loss will be compensated. The compensation paid to landowners for the purchase of the 44-meter corridor area represents, on average, about 96 percent of the total annual household expenses for these families. This level of compensation could help alleviate some of the potential problems stemming from the land acquisition process.
- The average level of compensation paid for purchasing affected land (based on State Land Replacement Fee (SLRF)) represents a high premium on the lost income from households' land-based activities. The lost income over a period of three years from land-based sources represents only about 44 percent of the land purchase amount. In addition, land owners will gain the right to utilize their land at the end of the construction period. This, together with additional assistance from the RAP Fund and to Sakrebulos for grazing rights, will significantly boost the income of private landowners. In other words, PAPs will be able to restore or substantially improve their incomes, providing their use their compensation wisely. Additionally, the RAP Fund (Chapter 5) contains an investment guidance component to assist PAPs.

- Sakrebulo compensation from the RAP Fund for grazing fees, which will be provided for 3 years and will cover the fees Sakrebulo collect for the purpose of grazing, will provide a benefit to community members utilizing these lands<sup>1</sup>
- More than three quarters of survey respondents attended various consultations on project activities; the majority would still like to have more detailed information on how these activities will affect them. A Guide to Land Acquisition and Compensation, which details the entitlements, rates and yields has been distributed to the affected populations and communities (8,000 copies in Georgian and Russian languages)
- The most common concern that people have is on the level and timing of compensation that will be paid for land acquisition. They request further information about:
  - a) Compensation amounts and procedures;
  - b) Landowners' rights and consultation availability;
  - c) Land assets valuation procedures;
  - d) Multi-owner compensation procedures;
  - e) Compensation procedures in the case of an absentee owner;
  - f) Degree of project impact on public pastures and forest, as well as on other land that is communally used but under state ownership;
  - g) Land restoration plans, including the length of time it will take the land to regenerate.
- There is little information among the landowners in terms of formal procedures necessary to complete land purchase transactions; most of them (74 percent) reported "having no idea" in terms of what is needed to transfer land ownership.
- The results of the October RAP survey and simultaneous qualitative interviews are consistent with the findings of the World Bank and other international organizations in Georgia,<sup>2</sup> attesting to the validity of the field and analytical work undertaken for the project.

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<sup>1</sup> The amount of this assistance will need to be determined on a case-by-case basis, based on the budget of the year before the construction starts. For budgeting purposes, the RAP survey established that on average, each household pays about 43 GEL for communal grazing rights to Sakrebulo during the construction period of three years, or about 14 GEL/year. The average population of each Sakrebulo is 1,250 people, which corresponds to 291 families. Therefore, the total payments over three years per Sakrebulo can be expected to be around 12,500 GELs (or 4,200 GEL/year). However, qualitative interviews revealed that many members are in arrears in their fee payments. Since the payments will be made based on Sakrebulo budgets (and not actual receipts), these numbers are averages, and, indeed, both the range of community-used lands and people utilizing them may vary, it is estimated that an average of 27,000 GEL/Sakrebulo over a period of 3 years (9,000 GEL/year/Sakrebulo) from the RAP Fund should comprise a sufficient budget.

<sup>2</sup> References include: Georgia Poverty Update, January 10, 2002, The World Bank; Georgia Agricultural Development Staff Appraisal Report, 1997, The World Bank; Georgia Social Investment Fund Project, Project Appraisal Document, 1997, The World Bank.

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### 4.3 BROAD CHARACTERISTICS OF AFFECTED POPULATIONS

The October 2002 RAP survey of resident owners and users of land plots affected by the BTC pipeline construction in Georgia is comprised of a sample of 450 respondents. The majority of questionnaires were administered to actual owners of affected plots, comprising 372 respondents. A majority of these respondents indicated that they are the sole owner of the affected plot (96 percent). Only sixteen persons, or 4 percent, said they are co-owners of the land. If the owner is an absentee, it was most common that either a spouse or a close relative was taking care of the affected plot.

The households represented by the interviewees and the survey span six administrative districts located in the southern portion of the country.<sup>3</sup> Table 4.2 shows the number of land plots that will be affected by the project by general corridor region (Samtskhe-Javakheti/Southwest, Kvemo Kartli/Southeast) and by district.

Roughly half of affected land plots covered in the RAP survey are located in the Samtskhe-Javakheti (Southwest) region of the pipeline corridor; and the rest are in the Kvemo Kartli (Southeast) region.

It is important to note that the intent of the RAP surveys have not been to collect data on the individual characteristics of those interviewed, but, rather, to extract general household characteristics from interviews with the owner or user of affected land plots. The overall aim is to extrapolate from these findings to the broader, actual population that will be affected by the pipeline project. The sample of 450 distinct land owners, representing about 17 percent of the 2,632 affected owners, allows extrapolation with a reasonable certainty.

**Table 4.2 Distribution of 450 Affected Plots by Pipeline Corridor Region and District**

Region	District	Number of parcels	Percent of parcels
SAMTSKHE JAVAKHETI (Southwest)	Adigeni	21	5
	Akhalsikhe	154	34
	Borjomi	53	12
	Total	228	51
KVEMO KARTLI (Southeast)	Gardabani <sup>4</sup>	66	15
	Tetritskaro	23	5
	Tsalka	133	30
	Total	222	49
	TOTAL	450	

Source: BTC Georgia RAP survey, October 2002.

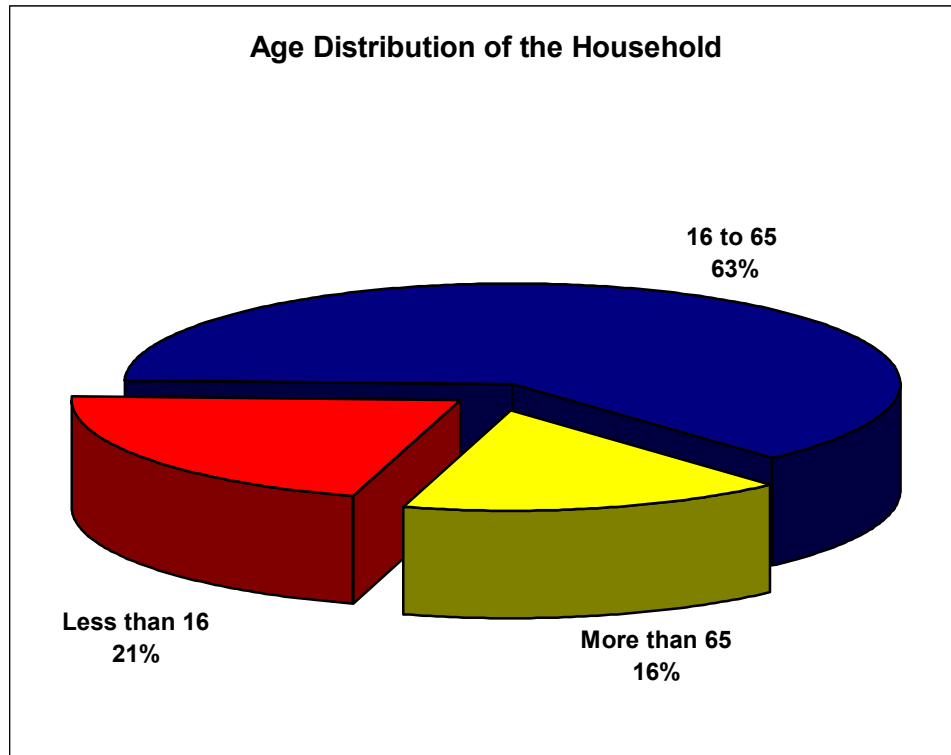
Gender, age and literacy are additional variables of importance to RAP considerations. The 372 sole-owner households represented in the October RAP survey account for a total of 1,590 inhabitants (4.3 members to a household on average), among whom 28 percent are female. Sixty-

<sup>3</sup> The BTC project actually affects 7 districts, but in one of these districts, Marneuli, only 5km of land will be impacted. Because of this, the Marneuli region was not included in the RAP survey.

<sup>4</sup> Affected plots which fall within the boundary of Rustavi City are included in Gardabani district in all tables in this chapter.

three percent of these persons are between the prime employment ages of 16-65. This finding mirrors the corresponding official national statistic: 68 percent of Georgians are aged 15-64 years old.

**Figure 4.1 Age Distribution of Households Surveyed**



Source: BTC Georgia RAP survey, October 2002

PAPs are highly literate; 85 percent of those over 18 have a high school education. In Georgia, the national literacy rate for those 15 and over is 99 percent (100% for males and 98% for females). Consequently, the dissemination and absorption of public information regarding the pipeline should not be an issue providing that communication is in both Georgian and Russian.

The surveyed communities appear to be highly stable. Of the 450 survey respondents, 87 percent of the owners are located in their communities. Hence, the accessibility of affected individuals/households during all phases of the project can be expected to be high, although there is still a small, but substantial portion of absentee landowners who need to be reached.

The affected communities also appear to be highly insular. The members of the surveyed households are predominantly subsistence farmers who live on the land year-round. They consume a high level of what they produce and sell the remainder at market. They also tend to rely mostly on their immediate communities for social support and dispute resolution. If they are short of cash for particular needs, they will borrow from family and friends, or they will borrow against future harvests, instead of dealing with banks or selling land. There is no rural banking in much of the affected areas and people, in general, appear to be distrustful of the financial "institution." Instead,

they tend to rely on and trust village leaders (village/regional governor) and members of their elected village councils (Sakrebulo) more so than unfamiliar, external sources of assistance.

In response to lack of trust in banks, the project's strategy has been to make banking services available at no cost to affected people, and to educate people as to the advantages of keep money in a bank. The project has contracted with a reputable bank in Georgia to ensure a maximum spread of banking facilities in the communities along the pipeline route. In areas where suitable facilities did not exist, the project has selected appropriate buildings and refurbished them to a proper standard. Dedicated banking centers will be located in 8 locations along the pipeline route. These centers are equipped with office space for the administration, cash handling and banking operations as well as waiting areas and general facilities. Extra security, fully trained in the Bank's internal operations and BTC's specific requirements, will be at each location. Security staff will maintain contact with local authorities at all times.

A bank account will be opened for each individual landowner or user at no cost. Options to transfer or withdraw all or part of the funds will, naturally, be available. BTC is undertaking, in conjunction with the partner bank and other PR advisors, a series of education exercises with affected people to assist in building confidence in banking systems. Additionally, the RAP Fund's advisory services will also aim at providing guidance to affected land owners/users.

#### **4.4 HOUSEHOLD CHARACTERISTICS**

Farming is the principal livelihood of all surveyed PAPs, accounting for 69 percent of household incomes across the six affected districts as a whole (Table 4.5). In Gardabani district, which includes Rustavi City,<sup>5</sup> the proportion of incomes attributable to agriculture is lower since, as a heavily industrialized area, and as Georgia's third largest city, the majority of the cash income of households located in Rustavi is derived from industrial and service sector jobs. In Tetrtskaro, a significant portion of cash incomes is obtained from government pensions.

The average home size of RAP survey respondents is about 4 rooms. Homes in the Kvemo Kartli, or Southeast region of the pipeline corridor, are generally smaller with 2-4 rooms; homes in the Samtskhe-Javakheti, or Southwest, region are generally larger with 3-5 rooms. Only 6 of the surveyed plots have dwellings located on the plot, none of these will be affected by the pipeline.

Table 4.3 presented below summarizes household amenities as reported in the RAP survey. Telephones, sewing machines and televisions are the most common household assets. Running water and inside toilets are less common. Vehicle ownership is claimed by a third of the sample respondents and tractors by less than 10 percent.

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<sup>5</sup> Even though the Rustavi City is a separate administrative unit, it is included in Gardabani district for survey results presentation purposes.

**Table 4.3 Household Amenities of Surveyed Population**

Goods and Facilities	Percent of households with amenity
Inside toilet	15
Running water inside the house	32
Telephone	68
Color TV	45
Sewing Machine	49
Video Cassette Recorder	71
Satellite Antenna	4
Tractor	9
Car, minibus or truck	26
Electricity generator	2
Beehives	4
Carpet looms	1

Source: BTC Georgia RAP survey, October 2002.

Ethnically, nearly three quarters of the affected households in the RAP survey are Georgian, with the second largest ethnic identity being Armenian. Table 4.4 provides a breakdown of the ethnicity in the surveyed households by general region.

**Table 4.4 Ethnic Distribution of Affected Households**

	Percent of households
Georgian	69
Armenian	19
Greek	11
N	372

Source: BTC Georgia RAP survey, October 2002.

## 4.5 HOUSEHOLD INCOME AND EXPENDITURE

The six districts that were surveyed in two southern regions of Georgia face the common economic hardships that all Georgians contend with today. After achieving independence in 1991 Georgia's traditional network of outside economic ties essentially collapsed. In particular, the loss of trade with former Soviet republics severely hurt local markets, rendering the majority of the working population highly vulnerable financially. War and ethnic skirmishes that followed independence contributed further to economic dislocations. The current national unemployment rate hovers around 15 percent, and 60 percent of Georgians are reported to be living below the poverty line.<sup>6</sup>

Against this backdrop, it is not surprising that average household incomes as reported by the RAP survey respondents are extraordinarily low in most cases. The annual average household cash income is around 4,128 Lari, or about US\$2,064.<sup>7</sup> However, the level of self-consumption of PAPs is significantly high and it helps keep them out of poverty. It is estimated that on average, PAPs

<sup>6</sup> CIA, The World Fact Book, 1999 estimates.

<sup>7</sup> These figures were estimated on the basis of monthly total average income for all districts as reported in Table 4.5; a conversion rate of 2 Georgian Lari to 1 US Dollar was applied.

obtain the equivalent of 758 GEL/year/household from the consumption of food items that they themselves produce.

#### **4.5.1 Income**

Average monthly sources of cash income and self-consumption for the 372 PAP households (interviewed during April 2002 RAP survey) by region and district are shown in Tables 4.5 and 4.6. These data are presented both in terms of the local currency and as percentages of total incomes. The data show that, on average, the major source of income for households across all the districts studied is agriculture. Rustavi City, on the other hand, is located in a heavily industrialized area and not as much reliant on agriculture. According to Tables 4.5 and 4.6, and in terms of income alone, the lands along the Southeast portion of the pipeline route appear to be slightly wealthier. In the Southeast portion of the corridor, households in Gardabani district (including the city of Rustavi) reported the highest cash incomes. In fact, the total average monthly cash income in Gardabani district supersedes the total average monthly income of any other district along the entire corridor path.<sup>8</sup> Tsalka region has the second highest cash income level due to its high level of agricultural activity. This finding is in agreement with the finding of the ESIA for Georgia. According to the ESIA “More crops are grown for sale in Tsalka than in any other district.”<sup>9</sup>

The consumption of self-produced items is a major source of income for all districts, except in Gardabani district (which includes Rustavi city). In Adigeni and Akhaltsikhe districts, the estimated cash value of monthly self-consumption is even higher than the level of cash income obtained from all sources other than agriculture, illustrating the high level of dependence on agriculture in rural areas. It also shows that the whole story of household incomes is more complex than obtaining wages, pensions and remittances. Given that their land is their highest income-generating asset, a majority of surveyed households are likely to be concerned about the potential for lost income that may result from any temporary or permanent interruption of their agricultural activities due to pipeline construction.

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<sup>8</sup> Averaging Gardabani district’s total monthly income with the more modest total monthly incomes earned in the other districts in the Southeastern region yields a total regional monthly income average that is at near parity with the corresponding statistic in the Southwest.

<sup>9</sup> BTC Project ESIA, Georgia, Socio Economic Baseline, April 2002, p.9-26.

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**Table 4.5 Sources of Monthly Household Cash Income (GEL)**

Region	District	Wage	Agriculture	Government Pensions	Income From Relatives	Other Income	Total Income	Self consumption
Samtskhe Javakheti	Adigeni	15	328	3	5	1	352	86
	Akhaltzikhe	7	261	4	3	2	278	82
	Borjomi	22	201	11	24	19	277	84
Kvemo Kartli	Gardabani	88	211	4	5	208	518	34
	Tetritskaro	28	162	8	39	12	249	34
	Tsalka	7	355	10	3	2	377	49
Average for all Regions		22	272	7	8	35	344	63

Source: BTC Georgia RAP survey, October 2002.

**Table 4.6 Sources of Monthly Household Cash Income – percent of total**

Region	District	Wage	Agriculture	Government Pensions	Income From Relatives	Other Income	Total Income	Self consumption (% of total cash income)
Samtskhe Javakheti (Southwest)	Adigeni	8	77	9	5	1	100.0	130
	Akhaltzikhe	4	85	8	2	1	100.0	120
	Borjomi	14	58	13	8	7	100.0	84
Kvemo Kartli (Southwest)	Gardabani	31	47	7	1	14	100.0	27
	Tetritskaro	22	37	23	7	12	100.0	54
	Tsalka	5	71	20	2	2	100.0	75
Average for all regions		11	69	13	3	5	100.0	86

Source: BTC Georgia RAP survey, October 2002.

Table 4.7 provides data that are useful for understanding the types of agricultural activities that contribute to household incomes in each district. It is important to remember that a single family is usually engaged in cultivating more than one crop, and the same family may be engaged in these activities on more than one plot of land. Table 4.8 shows the incidence of trees on affected plots and the average production derived from them during one year.

Further, Table 4.7 shows that the cultivation of potato, wheat and mixed crops are the most prevalent agricultural activity along the entire pipeline corridor. In the agriculturally wealthier districts, such as Tsalka and urban areas in Gardabani (Table 4.9), the agricultural activities yield incomes beyond subsistence needs for some. In the less wealthy districts of Adigeni and Akhaltzikhe, more cases of solely subsistence farming can be expected. In the lowest income districts according to the RAP survey, e.g. Borjomi, (Table 4.7) the purely farming households may be the most vulnerable to land acquired as planned by the BTC project.

**Table 4.7 Crops on Affected Land Plots by District (percent of plots)**

	Adigeni	Akhaltzikhe	Borjomi	Gardabani	Tetritskaro	Tsalka	Overall
Hay	-	1	7	17	-	31	10
Potatoes	20	44	7	17	12	12	59
Beans	40	34	64	33	38	6	20
Corn	40	35	29	33	62	-	26
Pumpkin	-	-	7	-	12	-	1
Garlic	-	2	7	17	12	6	2
Barley	7	7	-	-	-	25	8
Wheat	40	27	7	-	-	25	27
Cucumber	-	6	-	-	25	-	3
Tomatoes	-	6	14	-	25	-	4
Beets	-	4	14	-	25	-	3
Fruit	-	4	21	17	12	-	5
Pumpkins	-	6	14	17	12	-	3
Onions	7	2	7	17	-	-	2
Cabbage	7	14	14	17	-	6	8
Vegetables	-	-	-	-	12	-	1
Dog-rose	-	-	7	-	-	-	0.3
Sunflower	-	1	-	-	25	-	1
Carrot	-	1	-	-	12	-	1

Source: BTC Georgia RAP survey, October 2002.

**Table 4.8 Trees on Affected Plots**

	Percent of affected plots with trees	Average Annual Product from these trees (kg)
Fruit trees		
Apple	9	960
Pear	5	643
Peach	2	514
Cherry / Sour Cherry	3	742
Plum	13	1,135
Walnut	2	725
Hazel Nut	2	486
Other	6	628
Timber Trees		
Oak	2	858
Other	4	727

Source: BTC Georgia RAP survey, October 2002.

Once implementation of the BTC project is complete, most traditional agricultural activities can be resumed on the land plots that will have been disturbed by construction. The root structures of the types of crops currently being grown in most areas will not penetrate deep enough into the soil to preclude resumption of these activities following project completion. Fortunately, growing these crops does not require deep plowing (deeper than 30cm will be prohibited following pipeline construction). However, since cultivation will be interrupted on a relatively large segment of some of the affected plots (Chapter 6), the maintenance of livelihoods during the construction period is a RAP issue that merits serious consideration. As illustrated above, the basic livelihoods of the majority of households surveyed for this report are integrally tied to land-generated products and incomes.

## 4.5.2 Expenditures

The average monthly household expenditures of RAP survey sample respondents are presented in Table 4.9. These figures indicate the major categories for which PAPs spend money and effort.

The data in Table 4.9 suggest that across all districts, food expenditures and other short-term household expenses such as transport, gas, etc. comprise the largest portion of household expenses. In household food expenditures, self-consumption constitutes an important portion, especially in Adigeni, Akhaltsikhe and Borjomi districts. The monthly adjustment of other major purchases and annual expenditures such as clothing, furniture, agricultural inputs, and medical and education expenses comprise the next biggest category. Energy expenditures are comparatively low, although by no means insignificant, a result that is not surprising given that sources of energy are not readily available in Georgia, particularly in rural areas.

**Table 4.9 Average Monthly Household Expenditures by District (GEL)**

	Borjomi	Tsalka	Tetritskaro	Akhaltikhe	Adigeni	Gardabani	Average
Total monthly household food expenditures	200	132	133	161	165	183	159
Of which value of monthly self-consumption	83	49	34	82	86	34	63
Short-term monthly household expenses	129	78	108	126	102	165	116
Major household expenses – adjusted for monthly average (clothing, repairs, major purchases etc.)	167	133	108	119	101	216	141
Monthly household energy expenses (adjusted from annual)	39	41	28	27	30	48	36
Total average monthly household expenses	535	383	376	433	398	613	452
Total monthly per capita household expenses	117	117	121	106	145	150	120

Source: BTC Georgia RAP survey, October 2002.

The absence (or relative lack) of expenditure on taxes is consistent with expectations. This characteristic is symptomatic of a national-level problem. The failure to collect taxes due to corruption and other administrative inadequacies is endemic, and economically debilitating, not only to Georgia, but to other now-independent former Soviet states as well.

A comparison of the data in Tables 4.5-4.6 (Income) and 4.8 (Expenditures) indicates that the sample population surveyed for this study generally lives at a subsistence level. On the whole, across the six districts, there is about a 10 percent difference between total monthly incomes (cash

incomes and self-consumption, together) and expenditures. As expected, expenditures are slightly higher than declared incomes.<sup>10</sup>

It is, therefore, more accurate to use the level of expenses to reveal household income levels. The level of per capita monthly expenditures, which can be used as a proxy for estimating household income, are highest in Gardabani (equivalent of US\$75/month) and Adigeni (equivalent of US\$72/month) districts. Across the districts, this average is about 120 GEL/month or the equivalent of US\$60/month. These levels indicate that even at the highest level, affected households have a slightly higher income level than \$1/day/capita poverty level.<sup>11</sup>

### **4.5.3 Estimated Impacts on Incomes**

It is estimated that the average levels of compensation paid to landowners in project areas for their affected plots will comprise a significant addition to their existing incomes.<sup>12</sup> The average land owner household will lose 11 percent of its income due to land acquisition, but will receive significant compensation for this loss.

The SLRF that will be paid for the affected land is close to 96 percent of total annual household expenditures, such a high premium may help alleviate some of the potential problems with land acquisition. In addition, the SLRF represents a significant premium over the estimated value of lost income from land-based activities. This lost income over three years is estimated to be around 46 percent of the SLRF for affected land across districts. Since the land will be returned to owners with minor use restrictions at the end of the construction period, this represents a very good deal for most landowners, although special attention will have to be paid to the identified vulnerable groups during implementation.

## **4.6 LAND OWNERSHIP AND AFFECTED LAND ASSETS**

The October RAP survey data show that about 83 percent of all respondents are owners (or co-owners) of land plots that will be affected by the BTC project. The remaining 17 percent of the respondents represent absentee owners. Usually, where the user does not own the land, it belongs to a friend or relative. Eighty-three percent of the owners indicated that they cultivate their plots together with their family members, while about 8 percent indicated working with relatives or friends; about 8 percent also said they cultivate their land by themselves. It is therefore not surprising that most land use arrangements are informal, formed on a social basis.

The RAP survey also asked respondents whether they “own or use any other agricultural land plots.” Table 4.10 and Figure 4.2 summarize the responses, showing that 76 percent of the surveyed

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<sup>10</sup> In most household surveys, there is a slight discrepancy between reported incomes and expenditures. In most cases, respondents do not want to report their full incomes, perhaps due to potential tax ramifications or other reasons. Income under-reporting is more usually seen in upper income brackets while lower income level households sometimes tend to over-estimate their incomes, although this over-reporting is not adequate to compensate for the bias at higher levels.

<sup>11</sup> This comparison does not take into account the adult-adjusted per capita incomes and purchasing power parity exchange rates in calculating poverty levels. Notwithstanding these detailed calculations, these figures are still useful in providing an estimate of the household living standards in affected areas.

<sup>12</sup> This estimate is based on the average levels of State Land Replacement Fee (SLRF) that will be paid per hectare of affected land. On average, it is assumed that 53,000 GEL/ha will be paid for irrigated land and 25,000 GEL/ha for non-irrigated land.

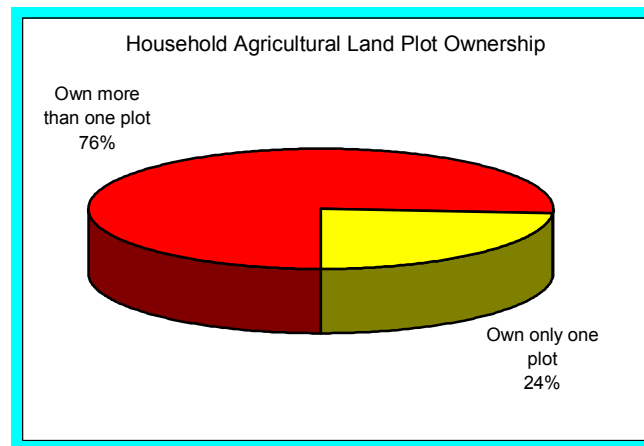
sample PAPs has other plots on which they can work. The answers also show that reliance on agricultural land is high in affected areas, and the vast majority of the households typically use land either with their family members or with friends and relatives living in the same village, suggesting an interwoven, complex land usage patterns among PAPs along the pipeline corridor.

**Table 4.10 Households with Additional Agricultural Land Plots**

	<b>Percent of households with additional agricultural land</b>	<b>Average number of plots owned by the household</b>	<b>Average additional area owned by the household (sq.m.)</b>
Adigeni	100	5.2	7,979
Akhaltikhe	99	4.2	9,228
Borjomi	96	2.4	3,859
Gardabani	50	1.1	952
Tetritskaro	50	1.3	2,000
Tsalka	89	2.7	5,596
Average for all Regions	76	3.2	5,754

Source: BTC Georgia RAP survey, October 2002.

**Figure 4.2 Household Agricultural Land Plot Ownership**



Source: BTC Georgia RAP survey, October 2002.

In most cases, land is registered in the name of the household head. However, in about 10 percent of cases, names of multiple family members appear on the title.

**Table 4.11 Land Title Registration**

	<b>Percent of households with family members receiving separate land titles</b>
Adigeni	10
Akhaltzikhe	2
Borjomi	14
Gardabani	5
Tetritskaro	14
Tsalka	21
Average for all Regions	10

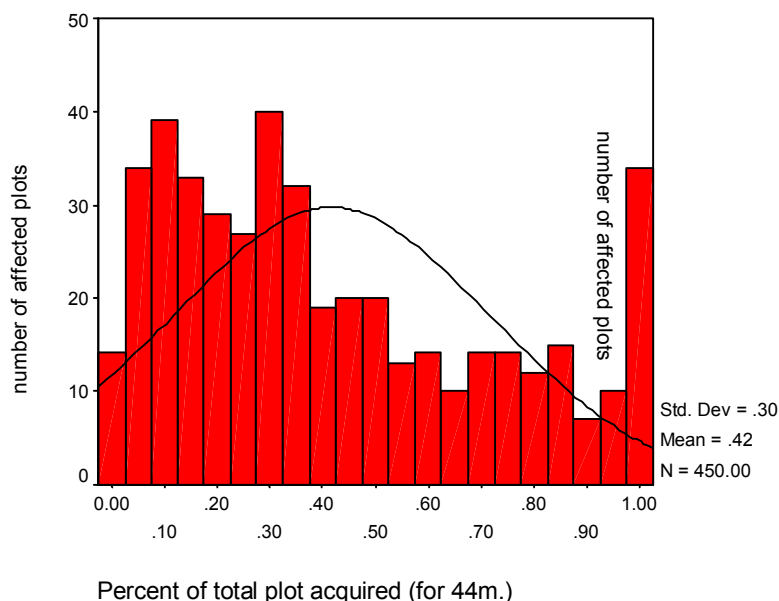
Source: BTC Georgia RAP survey, October 2002.

The overall level of Project impacts on livelihoods depend largely on the total size of household land holdings and the size of the affected plots. As a general rule, larger land plots will experience relatively smaller impacts. A large land plot, with its relatively smaller impact, can dramatically lessen the average impact within a region, thereby masking significant impacts that are often experienced by smaller plots. In addition, since most households own additional plots of land as well as garden plots, total livelihood and income impacts differ for each household.

Most significantly, the scenario of landownership and usage in Project affected areas are not readily apparent by a glance at a map of affected land parcels. The patterns of ownership and usage of parcels of land bordering the construction corridor are overlapping and, therefore, complex. “Spaghetti-like” is an adjective that may well describe the land ownership and usage relationships that exist in reality.

Figure 4.3 illustrates the portion of land lost to acquisition and the number of plots affected. These figures reflect the characteristics of 450 households included in the October RAP survey. Although they are not identical with the population data (of all affected plots) presented in Chapter 6, they are close and consistent.

**Figure 4.3 Share of 44-meter Corridor in the Affected Plots**



Source: BTC Georgia RAP survey, October 2002.

Tables 4.12 and 4.13 indicate that a large portion of the affected plots will be lost to the Project, although there is regional variability in the level of impact. The proportional impacts on plots are highest in Gardabani and Akhaltsikhe regions; 52 percent and 42 percent of affected plots in these regions, respectively, will be part of the construction corridor. In the remaining four districts, the corridor will consume between 19 and 38 percent of affected plots. Interestingly, Table 4.13 shows that the nominal average size of affected plots and the nominal average level of impact is the smallest in Gardabani district, pointing to the smaller size of urban plots that will be affected by the Project in that area.

**Table 4.12 Size of Private Plots Affected by the Pipeline – Survey Results**

District	Total Size of the Plots affected by the 44-meter corridor (Ha)	Total Area Affected by 44-meter corridor (Ha)	Average percent affected by 44-meter corridor <sup>13</sup>
Adigeni	30.1	9.7	37
Akhaltzikhe	167.3	69.1	42
Borjomi	246.9	65.8	31
Gardabani	61.8	27.6	52
Tetritskaro	261.4	44.2	19
Tsalka	136.7	42.0	38
TOTAL	904.2	284.4	37

Source: BTC Project, GIOC Data, GIS Database, 2002.

**Table 4.13 Average Size of the Plots Affected by the Pipeline**

District	Average size of Plots affected by 44-meter corridor (Ha)	Average area Affected by 44-meter (ha)
Adigeni	0.21	0.07
Akhaltzikhe	0.22	0.08
Borjomi	0.38	0.10
Gardabani	0.14	0.06
Tetritskaro	0.63	0.11
Tsalka	0.36	0.11
Average for all Regions	0.32	0.09

Source: BTC Project, GIOC Data, GIS Database, 2002

<sup>13</sup> It is important to note that the aggregated ratio of total affected area to total size of affected plots, as well as the aggregated ratio of average size of affected area to average size of affected plots do not represent the average level of impact calculated for individual households. The “average level of impact” is calculated as an average of impacts computed for each plot and is the correct method of estimating household-level impacts.

**Table 4.14 Project Impacts on Affected Plot and Total Household Land Holdings**

	<b>Impacts on affected plot (percent of households)<sup>14</sup></b>	<b>Impacts on total household land holdings (percent of households)</b>
Less than 25 percent affected	47	76
Between 26 – 50 affected	25	17
Between 51 – 75 affected	12	3
More than 76 percent affected	16	4

Source: BTC Georgia RAP survey, October 2002 and BTC Project, GIOC Data, GIS Database, 2002.

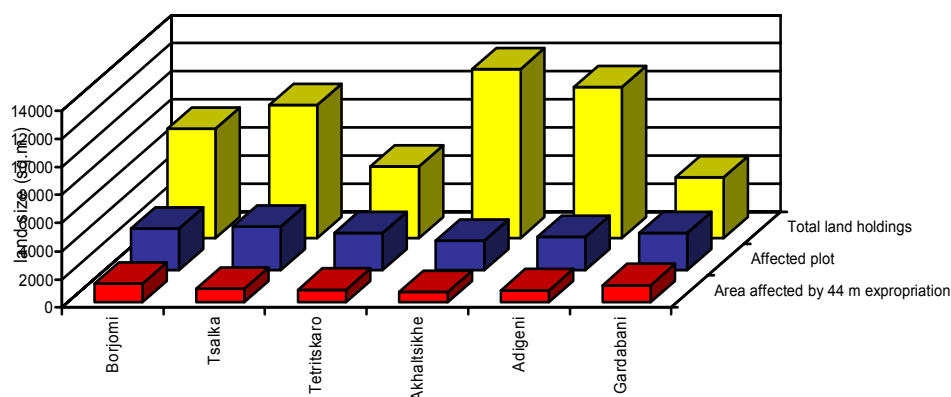
The RAP survey collected information on additional land plots that PAPs own, and revealed that while impacts on individual plots are high, impacts on aggregate household land holdings are lower. Table 4.14 shows that<sup>15</sup> even though about 16 percent of the PAPs stand to lose more than 76 percent of the affected plot (with 6 percent losing all of the affected plot), only about 2 percent will lose all their land holdings. Over three-quarter of the PAPs will lose less than 25 percent of their total land holdings, with relatively lower impact on their livelihoods. Those who will lose more than half of all their land holdings are not many (7 percent), but will require special RAP focus.

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<sup>14</sup> These data are obtained directly from the GIS survey of all affected plots. The impacts on total holdings are calculated based on the sample survey.

<sup>15</sup> These results are not identical to the results presented in Chapter 6 in terms of impacts on plots since this table is based on the RAP survey of households while the results in Chapter 6 are calculated from the latest available GIS data set. However, they are close and consistent.

**Figure 4.4 Household Land Ownership and Affected Land (44-meter Corridor)**



Source: BTC Georgia RAP survey, October 2002.

In Gardabani and Tetrtskaro districts, total household land holdings are smaller, rendering PAPs in these regions more vulnerable to income loss associated with the Project. Figure 4.4 illustrates the impacts of land acquisition over the total land holdings of the household members in affected households, on a regional basis. Residents of Gardabani district in particular risk a high level of impact both on the affected plot and on the total household land holdings. Tetrtskaro district is the least affected in terms of proportional loss on the affected plot, however, the PAPs there are almost equally vulnerable as those in Gardabani in terms of the proportional loss of total land holdings due to the Project.

The vast majority (86 percent) of the affected households have a garden plot attached to their houses, averaging almost 0.1 hectare (922 square meters) in size. The garden plot produces an important portion of the food for household consumption (“Expenses” Section) and is, therefore, crucial to the well being of the household. None of these garden plots are on the affected land plots, so the impact on them would be minimal.

Since, typically, numerous households use a given plot of land, and a majority of households have other land plots in addition to the affected plot, one household may lose a significant portion of one plot that they farm, while at the same time hardly being affected on another plot that they also use for agricultural activity. The patterns of land usage are, in part, a result of post-independence land distribution (privatization)<sup>16</sup>. They are also governed by a combination of tradition, convenience and necessity and do not appear to be readily amenable to simple quantification or analysis.

The results of the October RAP survey reveal that that most households will not suffer greatly due to land acquisition (especially those who have more than one land plot), although impacts on some will be substantial. For instance, households losing more than 50 percent of their land plot to the Project stand to lose, on average, 24 percent of their land-based incomes while those with less losses on their plots lose only 7 percent of their land-based incomes. Similarly, if a household loses

<sup>16</sup> Ebanoidze, Jaba, “Integrating Land Issues Into the Broader Development Agenda,” Association for the Protection of Landowner’s Rights, Georgia, April 2002.

more than 30 percent of their plot to the Project, they stand to lose 17 percent of their land-based income.<sup>17</sup>

These groups are not statistically different than the average landowners in terms of their income levels and land holdings; thus, the analysis reveals that a small but significant group of households will be disproportionately affected due to land acquisition. Table 4.15 illustrates various losses of these households.

**Table 4.15 Land Losses and Income Losses**

<b>Household land losses</b>	<b>Average estimated lost land income from 44-meter corridor (GEL/month)</b>	<b>Average lost land income estimated as portion of total expenses (percent)</b>
Less than 30 percent	22	6
Less than 50 percent	24	7
More than 30 percent	51	17
More than 50 percent	67	24

Source: BTC Georgia RAP survey, October 2002.

#### **4.6.1 Absentee Owners**

A significant percentage (17.3%) of affected land plots are owned by people who live elsewhere. To better understand the characteristics of the absentee households, a special portion of the RAP survey was designed and implemented with close relatives of absentee owners. The RAP survey with the relatives of these absentee owners, indicated the following:

- Most of the absentee owners live within Georgia, but there is a significant number living abroad. Only about 10 percent are in Tbilisi, and another 46 percent are elsewhere in Georgia. Those abroad comprise 42 percent of the total.
- The absentees received regular income from their place of origin (72 percent).
- Over two-thirds (69%) of absentee owners receive monthly income from their land averaging about 186 GEL (about US\$90).
- The close relatives who responded to the questionnaire confirmed that a great majority (86%) of the absentees are informed about the project and its need for their land; it appears that only 8 percent have no information. This finding points to the success of the project in disclosing information to both resident and absentee owners. Currently, the Land Team and APLR are conducting address identification of absentee owners. Once this is complete, they will write direct letters to land owners and project information, including Power of Attorney forms, will be provided to them.

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<sup>17</sup> In addition to the descriptive statistics, separate correlation and regression analyses of land losses and lost land-based income as part of total incomes returned positive and statistically significant results, indicating that there is indeed a direct relationship between the portion of the plot a household loses and impacts on household incomes.

- In most cases (63%), the relatives responding to the survey were cultivating the land of the absentees. In about one-fifth of the cases, the land was not under cultivation and no one was tending it.
- Interestingly, the absentees are in close contact with their communities. Indeed, they visit their own village almost every other month, or sometimes more frequently. In total, they seem to spend three months per year in their village; the rest of the time they work elsewhere. Thus, their frequent visits to their communities presents an important opportunity for the project to purchase their land through successful negotiations. Nevertheless, the survey results indicate that in about a fifth of the cases, the absentee owner may be reluctant to come back to the community for the transactions. The project will pay reasonable expenses for travel to negotiations/payment sites for absentee owners who live in Georgia. For absentee owners living outside Georgia, BTC Co will pay reasonable travel expenses to the Georgian Embassy to arrange a consent or proxy.
- When asked specifically whether the absentee owner would come back to the community to sell his land, 63 percent of the respondents said “yes,” whereas 14 percent said “no,” and another 6 percent pointed out that this decision would depend upon the level of compensation. Half of the reasons for the negative answers were justified through the high costs of travel expenses, the length of the travel distances, or the fear of losing employment<sup>18</sup>. Given that a substantial proportion of the absentee owners are employed abroad (such as those from the affected Greek villages) this is an expected result. Absentee owners appeared to be eager to sell their land to the project; indeed 86 percent responded affirmatively when asked whether they would be willing to sell their land.
- The survey also tried to determine whether the absentee owners would be able to provide a power of attorney to someone in their communities to sell their land. The results showed that a great majority (73%) would be able to do so, whereas, 18 percent could not. There is, therefore, a need to educate absentee owners regarding the use of powers of attorney. The project can suggest to owners that they identify a village resident that they trust to handle the sale transaction on their behalf and to deposit their compensation into an account of their choice.

Another survey with a small sample of absentee owners resident in Tbilisi was also conducted in October 2002. The results may not be representative, as only 10 percent of all absentee owners live in Tbilisi (based on the larger survey). The absentee owners in Tbilisi are somewhat divided in their desire to sell their land to BTC Co; about one-half are willing to do so if the price is right; of the remainder, two-thirds are unwilling to sell their land at any price. Considering that over 40 percent of absentee owners reside abroad and may not return to their village given the expenses involved, and because some of those within Georgia are unmotivated to sell their newly acquired private land, it may not be possible to easily acquire all the land needed for the project.

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<sup>18</sup> In a related question, the respondents re-affirmed that the absentee owner could not return without risking his job and/or paying excessive amounts of money to cover the travel expenses. Some 76% pointed out that the travel costs would be too high, 34% said that income losses from the job left behind would be high, and yet another 24% said that people could lose their employment. An additional 11% pointed out that travel reimbursements would not cover the expenses incurred.

Only a few of the absentee owners in Tbilisi report difficulties in being able to return to their communities to sell their land; these few are disabled or elderly. A majority (68 percent) of the absentees state that they would want to handle the sale themselves; the rest have close family members back home who would be willing to handle the transaction. Again, the majority expresses no difficulties in returning to their original communities, but is not eager to lose time and money.

Among additional concerns raised by the absentee owners are issues of valuation and severance. Some are also concerned that the land to be taken by the project would prevent them from building a home on that property.

## **4.7 PROJECT EFFECTS ON AGRICULTURE**

This section goes beyond the overview of PAP agricultural activities presented in the preceding sections and expands upon PAP agricultural activities by presenting more detailed information about agriculture, grazing land and forests, and about the project's impacts on these activities. It examines the overall picture of land-based resources in project affected areas on which PAPs depend for their livelihoods, and it evaluates Project impacts on these resources.

Agriculture is by far the largest source of income for PAPs (Section 4.5). Across the affected districts, agricultural income represents 69 percent of the overall cash income; in Akhaltsikhe, it contributes 85 percent to the cash income. In fact, since much of agricultural production is on very small plots and is consumed by the family producing it, it is never taken to market, and is not accounted for as cash income. Table 4.9 shows the levels of monthly self-consumption by district.

The crops that are grown throughout affected areas tend to be shallow-rooted. In every district except Gardabani and Borjomi, the three most common agricultural activities are the growing of potatoes, vegetables and grains. Hay and fodder production also is extensive in most districts, sometimes exceeding the production of human food (Table 4.7). Only in Akhaltsikhe and in Gardabani is deep-rooted fruit production at all extensive.

The nature of common crops is important for assessing project impacts. During construction there will be disruption of all agricultural activity within the project's 44-meter ROW. However, after the construction ROW is restored, much of the previous agricultural activity can resume. The cultivation of shallow-rooted crops, which are the mainstay of PAPs, can be resumed. Only fruit production from deep-rooted trees would be precluded. This implies that the most substantial impacts on agriculture will be short-lived, while the more minor effects may be persistent.

Another important use of land is for livestock grazing. As shown in Table 4.16, ownership of livestock is widespread in all districts except Gardabani. Over 80 percent of PAP respondents reported owning livestock. Averaged over these individuals, roughly three cows, six sheep and two pigs are owned by each respondent. Other livestock, such as chickens are also common.

**Table 4.16 Average Numbers of Livestock Owned by Respondents - by District**

	Adigeni	Akhaltzikhe	Borjomi	Gardabani	Tetritskaro	Tsalka	Average for all Regions
Cattle	2.9	3.2	3.3	4.7	2.8	2.9	3.2
Sheep	2.5	4.3	7.5	5.2	-	7.4	5.9
Goats	-	3.1	25.5	4.7	-	8.0	6.4
Pigs	1.4	1.6	1.9	4.2	1.9	1.6	2.1
Horses and donkeys	1	1	1	1	1	1.1	1.0
Poultry	12.9	16.3	15.3	25.7	11.9	11.9	15.4

Source: BTC Georgia RAP survey, October 2002.

Livestock is usually fed on community-used pastures (89 percent of those with livestock) or on the nearby other State lands (40 percent). Table 4.17 below gives further detail on grazing practices.

**Table 4.17 Livestock Feeding Areas by District (percent of households)**

	Adigeni	Akhaltzikhe	Borjomi	Gardabani	Tetritskaro	Tsalka	Average for all Regions
In the barn near the house	-	12	67	68	54	72	46
At the village (community-used) pasture	86	88	74	93	100	96	89
At the pasture of my own	-	-	19	-	-	6	5
At the state land	14	21	33	57	69	59	40
In the deep forest	-	2	67	11	69	33	25

Source: BTC Georgia RAP survey, October 2002.

Given the importance of community-used and other State lands for grazing, it is not surprising that livestock owners worry about temporary or permanent restrictions caused by pipeline construction that may prevent them from using their own plot or community-used pastures to graze and feed their livestock. Respondents' estimates of the cost of buying feed for their livestock are presented in Table 4.18.

**Table 4.18 Annual Estimated Costs of Feeding Livestock**

	Annual average estimated cost (GEL)
Adigeni	1,104
Akhaltzikhe	2,017
Borjomi	1,283
Gardabani	2,518
Tetritskaro	1,267
Tsalka	1,573
Overall	1,758

Source: BTC Georgia RAP survey, October 2002.

Without specific delineation of which community-used lands are used for grazing, and without knowing how pipeline construction will affect access to these lands, it is impossible to determine how well founded the respondents' concerns about access to community-used lands are. During construction steps will be taken to ensure that construction does not block access to specific portions of community-used lands used for grazing. It may be the case, however, that the noise and tumult surrounding construction will make community-used land undesirable. After construction is completed and the ROW restored, access to such land should be unimpeded and the project should have no lingering effects.

The project will also have impacts on forest and water resources. In general, close to 60 percent of the respondents live near a forest area, and they utilize the forest resources in different ways. When those respondents who use forest resources were asked how the loss of the forest along the pipeline would affect the way they used the forest, a majority of them (62 percent) expressed some concern. Overall, one-third of the PAPs surveyed were uneasy about the project's effects on forest resources, and the remaining two-thirds seemed untroubled. The concerns that were expressed are summarized in Table 4.19.

**Table 4.19 Concerns Regarding Project Impacts on Forest Resources by districts (%)<sup>19</sup>**

	<b>Akhaltzikhe</b>	<b>Borjomi</b>	<b>Tetritskaro</b>	<b>Tsalka</b>	<b>Total</b>
We would have less firewood	44	55	23	22	35
We would have fewer products to consume and sell	19	10	23	2	8
It would increase hazard of natural disasters (flood, landslide)	38	52	23	33	41
We would lose the job we do for the forest administration	-	2	-	2	2
It would increase air and water pollution	50	69	77	79	70
N	16	42	13	58	134

Source: BTC Georgia RAP survey, October 2002.

Most of these concerns seem to be a result of poor communication/understanding rather than specific, well thought out issues. For example, while it is true that *some* trees will be chopped down, that is far from rendering the forest unusable. Similarly, the concern about there being no firewood for usage runs directly counter to the fact that BTC intends to make the branches and small trees that will be chopped down available as firewood for the communities. Concerns like this are common with large projects. Change brings some uncertainty and fear. BTC Co. will make a concerted effort to address and allay the fears. In particular, the ongoing activities of the local NGO (APLR) is aimed at providing awareness of the project and its impacts. Specifically, APLR is sharing with affected communities how limited the impacts on affected forest areas will actually be and how these will be fully compensated for.

<sup>19</sup> Adigeni and Gardabani districts are not included in this tables since the sub-sampling using forests in the district is made up of only 4 and 6 households respectively.

## 4.8 DISADVANTAGED AND VULNERABLE GROUPS

The “vulnerabilities” that may arise in the context of land acquisition, construction and operation activities of the Georgia segment of the BTC Pipeline are limited. The Project has carefully examined possible sources of vulnerabilities (i.e. gender, age, ethnicity, religion and economic-based vulnerabilities) through existing literature and socio-economic studies. Extensive consultations both for the ESIA and for the RAP were held pertaining to vulnerabilities. Considerations have been made to ensure that vulnerable and excluded groups are not disproportionately affected. At the same time, measures have been taken to provide assistance to those groups, such as the elderly, that may be disadvantaged.

The guiding objective of the Project is to treat all populations that may be affected by the Project in a fair, transparent and equitable manner. The Project’s methodology of impact assessment and mitigation development is based on a **“non-discriminatory approach”** with the principle of **“minimizing adverse impacts”** regardless of ethnic, religious, gender or other differences.

Although the project did not target ethnic or religious minorities directly, the different ethnic and religious groups along the pipeline route were covered within the comprehensive socio-economic survey, consultation and disclosure programmes. The Project will continue consultation in a culturally appropriate manner with communities in the vicinity of the proposed pipeline and facilities with the aim of minimizing adverse effects on lifestyles and livelihoods regardless of ethnic/religious diversities between the affected population living along the pipeline route.

As operator for the projects, BP business policies set the tone for the conduct of all project activities -- including security, land acquisition and employment. BP’s policies on Ethical Conduct, Relationships and Security set out commitments, responsibilities and expectations that include explicit support for the principles set forth in the Universal Declaration of Human Rights, the 1977 International Labour Organization Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy, and the 1996 OECD Guidelines for Multinational Enterprises. BP is one of the corporate signatories to the UN Global Compact in July 2000, and participates in its policy dialogue on the role of the private sector in zones of conflict, which is examining a range of human rights related issues. The policies are summarized in Box 1.

**Box 1. BP Policies: excerpts relevant to human rights**

***Ethical conduct***

- *BP supports the belief that human rights are universal. They are enshrined in the UN Universal Declaration of Human Rights, which we support. The Charter sets out the obligations to promote universal respect for and observance of human rights and fundamental freedoms for all, without distinction as to race, gender, language or religion. The promotion and protection of all human rights is a legitimate concern of business*
- *In our actions and out dealings with others we will... refrain from coercion*
- *We will expect the same commitments from third parties acting directly on BP's behalf*

***Relationships***

- *We will ... demonstrate respect for human dignity and the rights of individuals*
- *With governments: We will respect national sovereignty. We will work constructively with governments in the development of policy. We recognize changing public expectations of the extent to which companies should put pressure on governments on human rights issues and will seek, working in partnership with others, to resolve any tensions or conflicts arising between international expectations and national or local practices in a sensitive manner.*

***Security***

- *We will routinely assess security risks to develop processes to ensure these risks are effectively managed*
- *We must ensure that security is implemented in accordance with our policies on ethical conduct and relationships. Security management will take account of our support for the principles set out in the Universal Declaration of Human Rights*
- *We will engage in open dialogue and consultation with local communities to ensure that potential issues arising from our operations are identified and addressed*
- *Security should be taken account of during the proposal, planning and implementation of new projects*
- *Security incidents will be recorded and investigated and where appropriate legal and/or disciplinary action taken against offenders*

**The overarching aims of the BTC Co are to:**

- Ensure that there are no '**unintended consequences**' resulting from its activities that may lead indirectly to potential human rights abuses;
- Respect individual human rights in all project activities;
- Engage in dialogue and consultation with local communities, NGOs and governments at all levels to ensure that potential issues are identified and risks addressed;
- Invest in the communities for longer-term benefits, through Community Investment Programmes.

BTC recognises the fact that it is always important to identify vulnerable groups such as women, ethnic or religious minorities, the very poor or other socially and economically disadvantaged groups upfront and to understand power dynamics between various groups when mapping the local community and while addressing the impacts of the project in the area. It makes a commitment not to further increase existing vulnerabilities and to extend special assistance to help reduce these. Therefore, the BTC Project has undertaken a comprehensive stakeholder engagement programme, which includes national, regional, and more importantly community level stakeholders who will be directly affected from the Project.

The ESIA and RAP surveys indicate that there are people who might be potentially disadvantaged from the Project if the mitigation and compensation measures are not fulfilled. As a result, plans have been developed to ensure these groups are not further disadvantaged by the project. By the early identification of these groups and implementation of specific measures, the BTC project is committed to ensuring all categories of people are treated fairly.

As stated above BTC Co has followed a methodology of impact assessment and mitigation development based on a non-discriminatory approach. The Public Consultation and Disclosure Process for the BTC Pipeline project was designed to reach as many people as possible by using various methods of consultation such as the distribution of written information, announcements and public meetings, together with a clear feedback mechanism allowing all stakeholders to send their comments to the project. The different ethnic and religious groups along the pipeline route were covered within the socio-economic surveys; consultation and disclosure programmes and the impact of the pipeline on minority groups were also assessed as part of the whole impact assessment and mitigation development process. The results of the impact assessment on ethnic, religious, gender and age based vulnerabilities are summarised below.

#### **4.8.1 Ethnic and Religious Groups in the Context of the BTC Project**

There are various sources of data for analyzing ethnic and religious groups in the context of the BTC project. The Environmental and Social Impact Assessment (ESIA) social survey included affected communities, while the RAP survey included only the owners of affected plots. World Bank Poverty Assessment (2002), on the other hand, was conducted in the whole country while it did not point to any ethnicity-based differences in population groups. The following presents the results of the ESIA and RAP survey results.

##### **Ethnic Groups (ESIA Survey)**

Georgia is characterized by significant ethnic diversity, with Southern Georgia being the most ethnically diverse. Of the surveyed communities for ESIA

- 43% are Georgian;
- 25% are Armenian;
- 16% are Azeri;
- 15% are Greek;
- 7% are Russian and Byelorussian.

At the district level, the picture is somewhat different:

- In Gardabani most people are ethnically Georgian (48%) or Azeri (46%);
- In Marneuli, 100% of the surveyed population is of Azeri ethnicity;
- In Tetrtskaro, the majority of people are ethnically Georgian (34%) or Armenian (34%), although it is generally ethnically diverse, with representatives of a number of ethnicities;
- In Tsalka, 43% of the population is ethnically Greek, and 56% of the population is ethnically Armenian or Georgian;
- In Borjomi 70% of the population is ethnically Georgian, and the rest is split between people of Armenian and Greek ethnicity;
- In Akhaltsikhe people are ethnically Georgian (60%) or Armenian (40%).

In the majority of cases, settlements tend to be dominated by one ethnic group.

ESIA survey results show that the majority of the population that was surveyed in the area is Orthodox Christian, but religion varies significantly by district. For instance, 93% of the surveyed population in Borjomi is Orthodox Christian, while nearly 100% of the population in the surveyed villages in Marneuli is Muslim, a reflection of the large number of ethnic Azeris in the district. Gardabani is nearly equally split between Orthodox Christians and Muslims.

### **Ethnic Groups (RAP Survey)**

Semi-structured community interviews with the PAPs during the RAP Survey indicated that there are Greek and Armenian communities in Tsalka, Borjomi, and Tetrtskaro where women, and elderly women in particular, disproportionately outnumber men and youth. There are also Russian households in Tetrtskaro that are comprised of elderly parents left alone by their children. Although Greek households may represent a “transitional” group where elderly women are in the process of selling their houses and other property before they depart for Greece to join their extended families, there are also many of those who are not supported by their families abroad.

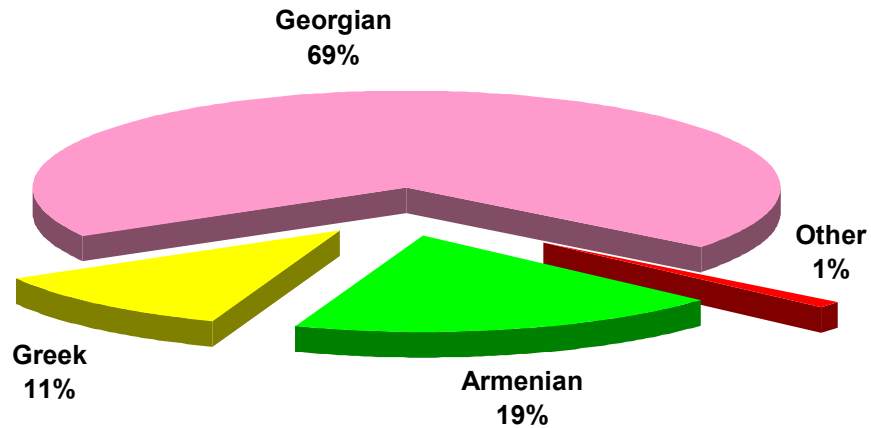
Among the RAP survey respondents (372 households surveyed in April 2002) the majority (69 percent) are ethnic Georgians. About one fifth are Armenians, and 11 percent are Greek. The survey did not come across any native Russian or Azeris<sup>20</sup>. The RAP baseline update was based on a large sample, covering almost a fifth of the affected private owners. This sample substantially differs from the sample of households covered by the ESIA. The RAP deals only with the directly affected land plots and their owners/users where the ESIA reaches out to the people in the near vicinity of the pipeline and AGIs.

Before the break-up of the Soviet Union, all Georgians studied Russian language intensively in schools. As a result, Russian is the language that is mainly used in communicating with, and distributing information to, non-Georgian populations.

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<sup>20</sup> Azeri communities located along the pipeline route are concentrated along the Georgia-Azerbaijan border, mainly in Marneuli and Gardabani districts. Marneuli district, due to having only one PAP, was not included in the sample of the survey. In the Gardabani district, even though the communities are mainly made up of Azeri households, the GIS database upon which the survey sample was based included only less than five land owners whose names are, most likely, in Azeri. Since a random sample was drawn across regions, it is likely these were not included in the sample. However, to compensate for this, the socio-economic survey team conducted semi-structured qualitative interviews with affected Azeri villagers in the Gardabani district. These interviews revealed that a limited number of Azeri households in the affected Azeri villages own most of the land in these villages and are wealthier than other households in the affected areas. They expect to experience a somewhat higher loss due to their loss of better agricultural land, however, they do not expect that their incomes will be seriously impacted because of the Project.

**Figure 4.5 Ethnicity**



Source: BTC Georgia RAP survey, October 2002.  
\* “Other” category includes Russians and Azeris.

The RAP survey asked about the ethnicity of the affected households, and found that Borjomi, Adigeni and Gardabani districts are almost fully ethnically Georgian, while Armenians made up 32 percent of the respondents in Tetrtskaro and 57 percent in Tsalka.

The RAP survey also analyzed the differences in expense levels, household total plot ownership, size of affected plot and level of effects from the 44 meter land acquisition by ethnicity.

It appears that while Armenian households seem to have smaller incomes, the relative impacts of the projects on households do not depend on the ethnicity of the household. The following tables indicate some differences among ethnic groups in terms of their access to household amenities and differences in characteristics.

**Table 4.20 Some Differences in Ethnic Groups in Terms of Household Variables**

	Have formal title to the land	Average per capita household expenses	The size of a plot the current house sits on (sq.m., excluding the yard area)	Size of the household garden plot (sq.m.)	Average household size
Georgian	95	142	151	1,013	4.4
Armenian	84	113	111	489	4.4
Greek	95	210	193	1,151	3.1
Average for all Regions	93	145	147	922	4.3

Source: BTC Georgia RAP survey, October 2002.

**Table 4.21 Ownership of Households Assets by Ethnic Groups (percent of households)**

	Telephone	Color TV	Tractor	Car	Indoor bathroom	Indoor water pipe
Georgian	30	55	8	25	22	37
Armenian	34	60	10	29	4	16
Greek	45	48	12	31	0	29
Average for all Regions	32	55	9	26	15	32

Source: BTC Georgia RAP survey, October 2002.

The average plot size affected by land acquisition seems to be higher among ethnic Greek households, but a close examination of Table 4.22 reveals that even though the affected plot size is bigger, the average size of these plots are also larger and, as a result, the proportion of affected land is actually the smallest among Greek households. Georgian households, on the other hand, stand to lose about 45 percent of their affected land as a result of land acquisition. Greek households also have, on average, significantly higher total land holdings than others. The ratio of land loss to total household land holdings, on the other hand, is the lowest for Armenian households, while the difference among them is statistically insignificant for Georgian and Greek households.

**Table 4.22 Level of Impact on Different Ethnicities in Georgia**

	Total monthly household expenses	Average size of the affected plot (sq.m.)	Average area affected by 44 m corridor (sq.m.)	Proportion of plot taken (44 m) to total plot area (%)	All land holdings of the household (sq.m.)	Proportion of plot taken (44 m) to total household land holdings (%)	Ownership of multiple plots (%)
Georgian	572	2,460	970	45	9,105	17	16
Armenian	470	2,148	612	37	7,599	10	13
Greek	528	4,367	1,300	33	11,283	15	10
Average for all Regions	547	2,611	942	42	9,050	16	14

Source: BTC Georgia RAP survey, October 2002.

## 4.8.2 Gender

Gender inequality in Georgia does not appear to be as serious a problem as in many other countries (World Bank 2002). Accordingly, education outcomes are comparable by gender, with women having slightly lower secondary completion levels than men, but higher enrollment in tertiary education. The legal framework for women's rights is for the most part sound, and women enjoy the same access to property, and protection of property rights as men.

Women in Georgia outnumber men in general as well as in some of the project districts. There are several explanations for this phenomenon. These include a decrease in the birth rate (both rural and

urban), an increase in mortality rates, and deteriorating health among all gender and age groups over time.

There are certain coping or survival strategies that are evident among rural women, and enhancement of these would be part of the RAP Fund's activities. Women of working age and capacity look for temporary and occasional informal jobs that are mainly paid in-kind.<sup>21</sup> The majority of women in affected areas live off their gardens and land plots that are used for raising vegetables, potatoes or fruits intended for family consumption. It is also clear that owning livestock (typically a cow or a pig, or a few sheep and/or poultry) appears to be a "life-saver" for rural families.

The ESIA has attempted to identify gender specific impacts on the project. The gender split within the ESIA surveyed communities is most pronounced in Marneuli where the population is 46.3% male and 53.7% female, linked to the out-migration of more males than females in search of employment elsewhere. In other districts it is closer to a 50-50 split between men and women. However, ESIA did not establish gender specific impacts of the BTC Project. There is reason to believe that a greater proportion of the employment opportunities that become available through the construction activities of the Project will directly benefit men, although households will also benefit. To balance the employment benefits, some of the CIP may be targeted specifically to generating income for women. (See Chapter 6 for discussion of CIP)

### **Gender issues with respect to RAP**

RAP specific differences between women and men, including between elderly women and men, were investigated more systematically. Two different sources of information on gender differences in the ownership of affected privately held plots were available: GIS data and the October RAP survey. In aggregate, there was very little specific information obtained through the RAP surveys and the GIS census. Cross-tabulations between the October survey data for land ownership, gender and age have produced results as illustrated Figure 4.6 and supported by the GIS census data distributions for land ownership by gender as shown in Table 4.24. Accordingly, male landowners outnumber females three to one in all of the affected areas. This pattern also prevails throughout each of the individual six districts examined. The largest percentages of female landownership are evidenced in Tetrtskaro and Gardabani districts.

While women and men have equal rights to land under civil law, the percent of women landowners is relatively low and highly variable from one district to another (See Chapter 6, Figure 6.3). In no region do women constitute even 50 percent of landowners. One might therefore tend to believe that the adverse impacts of the Project pertain disproportionately to men. However, the social reality is different in that the land has been registered on men as "head of the household" rather than as an individual. Thus, regardless of the gender structure of the ownership the impacts of land acquisition will be born by the household and not by individual women and men. There is however concern that the compensation for household assets will be paid disproportionately to men and women's access to cash compensation will be limited. Since the Project will operate within the existing legal ownership framework, there is little that can be done to mitigate this situation. Rather, it is expected that the widespread knowledge of the Project's land acquisition activities will help assure equal sharing of land compensation by men and women within each household.

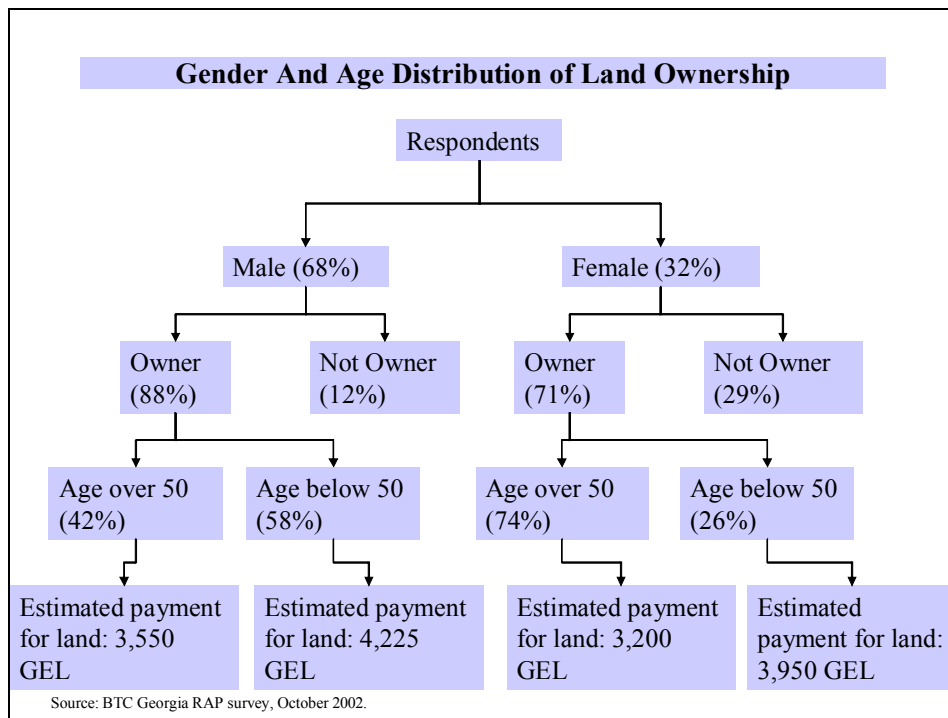
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<sup>21</sup> Use of the term "in-kind" refers to payment in commodity and not cash.

The situation of the **elderly** women and men is of particular concern to the Project. The RAP survey indicates that the majority of female landowners are older than 50 years of age. In contrast, the majority of male landowners are aged below 50 (Table 4.24). In other words, women tend to be registered as “owners” primarily when they are old or when they are heads of households. Elderly women constitute the majority of females with one plot of land or more (See Chapter 6, Table 6.5). Given that a majority of female owners are elderly, these women may have difficulty in using compensation payments to restore income levels. The Project will thus focus specially on assisting vulnerable population groups, which will include elderly female landowners. Needless to say, the same services will be offered to elderly men.

The Project’s compensation related impacts on women and men, regardless of their age, is statistically non-significant. In other words, the compensation received by men and women, whether elderly or not, is based on the same principles and rates. However, younger owners, both women and men, will receive higher levels of cash compensation. This is rather surprising considering that older women and men own slightly larger plot than do their younger counterparts (Figure 4.7). This is because the younger group loses a larger absolute amount of land to the Project.

**Figure 4.6 Gender and Age Distribution of Land Ownership**

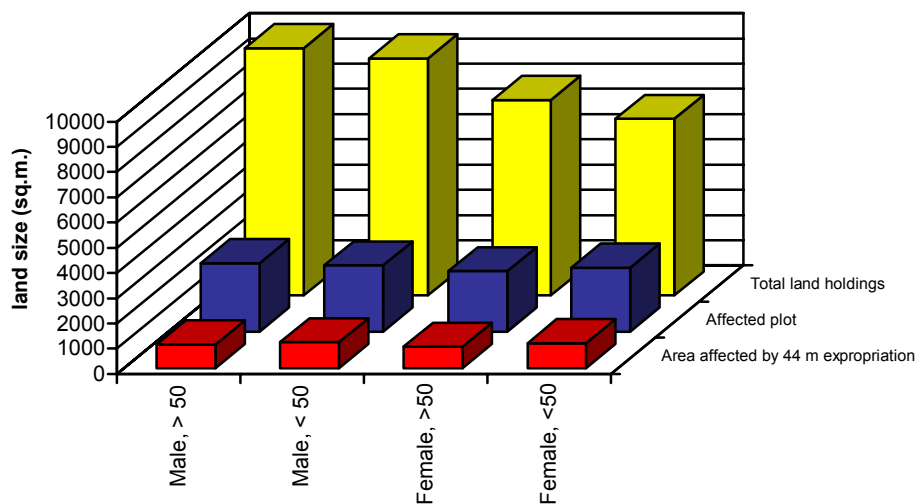


**Table 4.24 Gender of Owners – by District**

	<b>Female</b>	<b>%</b>	<b>Male</b>	<b>%</b>
Adigeni	10	4	140	9
Akhaltzikhe	130	49	516	34
Borjomi	63	24	199	13
Gardabani	NA	-	NA	-
Tetritskaro	51	19	309	21
Tsalka	9	3	374	24
<b>TOTAL</b>	<b>263</b>	<b>100</b>	<b>1,538</b>	<b>100</b>

Source: BTC Project, GIOC Data, GIS Database, 2002

**Figure 4.7 Age and Gender of Owner and Household Land Ownership**



Source: BTC Georgia RAP survey, October 2002.

### 4.8.3 The Elderly

An important demographic trend indicated in Georgia pertains to the ageing of the population. In most affected areas, there is out-migration of young people in search of economic opportunities that do not exist in Georgian villages. Elderly people in Georgia were found to be poorer than average, although this disadvantage was relatively small (World Bank Poverty Survey, 2002). Elderly owners may have difficulties if their in-kind incomes are substantially affected by the project. To safeguard their in-kind incomes, the elderly might need particular assistance to enhance the efficiency of cultivation in their garden plots. This assistance will be provided to them (as well as those interested younger owners) through the RAP Fund.

Another problem the elderly may encounter is the safe keeping of their land compensation payments since, traditionally, reliance on banking has been non-existent to very low and their payments may be more easily targeted for crime. The project will provide investment guidance to such landholders in utilising their newly acquired cash holdings from land sale proceeds. The local NGO, APLR, is also targeting this group with advise on banking opportunities so that trust in the banking system is enhanced and interest bearing investment possibilities are pursued.

#### 4.8.4 Economically Disadvantaged Groups

The following table illustrates the impacts of the project on the economically disadvantaged groups. For the purpose of the analysis, poor households have been identified as those who have less than \$2/day in terms of their monthly total per capita expenditures while the non-poor are all those who spend more than that amount. The poor make up about 17 percent of the affected households. There is not a significant difference between the poor and the non-poor in terms of proportional impacts of land acquisition.

**Table 4.25 Level of Impact on Economically Disadvantaged Groups in Georgia**

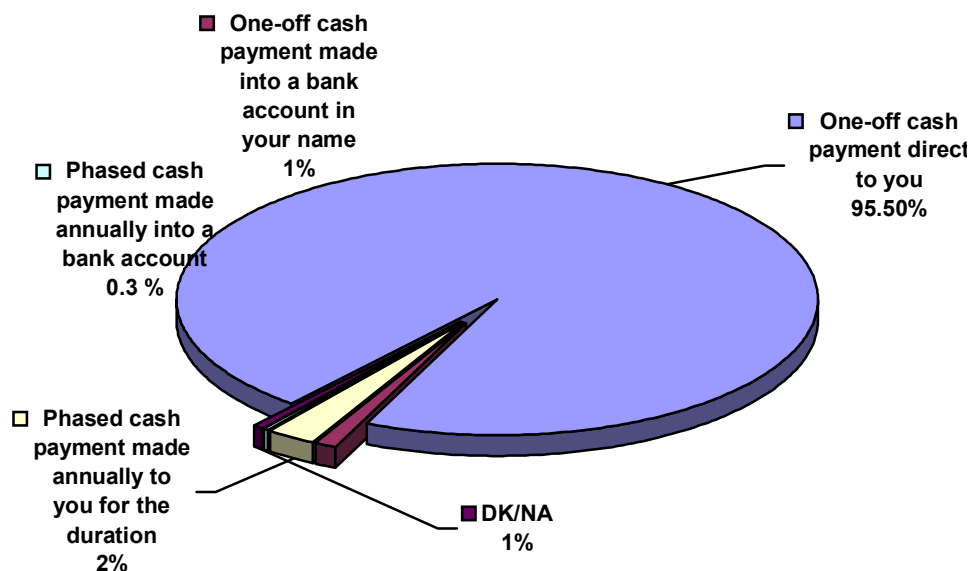
	<b>Total monthly household expenses</b>	<b>Average size of the affected plot (sq.m.)</b>	<b>Average area affected by 44 m corridor (sq.m.)</b>	<b>Proportion of plot taken (44 m) to total plot area (percent)</b>	<b>All land holdings of the household (sq.m.)</b>	<b>Proportion of plot taken (44 m) to total household land holdings (percent)</b>
Poor (less than \$2/day)	200	1,914	767	39	6,960	17
Non-poor (more than \$2/day)	616	2,750	977	43	9,470	16
Average for all Regions	547	2,611	942	42	9,050	16

Source: BTC Georgia RAP survey, October 2002.

#### 4.9 ATTITUDES TOWARDS THE PROJECT

The RAP survey results suggest that the pipeline project is a matter of interest for many in the local areas of the pipeline ROW. At least half of the RAP survey respondents in May indicated no objection to the land acquisition, provided they receive fair compensation. An identical percentage of respondents indicated that they would not have used the affected land any differently before the pipeline project. Direct cash payment was the preferred method of compensation expressed by about 96 percent of all respondents. Figure 4.8 below shows people's preferences concerning compensation methods.

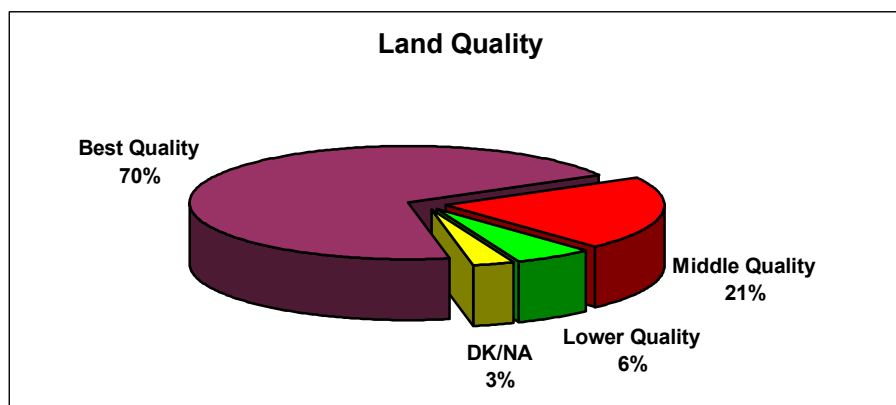
Figure 4.8 Compensation Preferences



Source: BTC Georgia RAP Survey, May 2002.

Figure 4.9 below shows that 70 percent of the RAP survey respondents feel that the land to be acquired is of the highest quality (for both crop production and for grazing purposes). This is the owners and users perception; it was not substantiated by an on-the-ground comparison of affected land to unaffected land.

Figure 4.9 Perceived Land Quality



Source: BTC Georgia RAP Survey, May 2002.

Commensurately, in May, over half the surveyed population requested that care be exercised during implementation to prevent deterioration of land quality. Other noteworthy results include concern over safety and ecological dangers that could arise (about 13 percent), and interest in having local population inputs incorporated into implementation planning (about 9 percent). These findings

were confirmed by the results of semi-structured field interviews conducted during October 2002 in affected villages.

#### **4.10 LEVEL OF INFORMATION AND PRIORITY IMPROVEMENTS**

The October RAP survey found that there is not adequate information among private landowners in terms of how to register their lands and how to conduct land transactions. About 74 percent of the respondents indicated that they have no idea what kind of formal procedures are required to transfer ownership of private land. The level of information about other formalities and resources such as tax certificates, the Department of Land Management Registry, and court actions was also low; only 6 percent of the respondents indicated familiarity. The level of information about how community-used lands could be transferred was found to be even lower: 83 percent of the respondents had no idea how this could be accomplished. In an effort to both help PAPs and assure timely implementation of the project, the Land Team and APLR are continuing in their efforts to inform the public of registration procedures. APLR will, in fact, assist landowners to carry out the process of sub-dividing the land and obtaining all legal documentation, on behalf of the projects.

People's priorities for improvements are focused on the development of local infrastructure. When asked what kind of improvements they would like to see in their villages, the first priority improvement requested was roads (61 percent), followed by finding a solution to their irrigation problem (41 percent), electricity improvements (18 percent), and heating gas improvements (14 percent).

The majority (78 percent) of the respondents participated in one or more of the consultation meetings that took place in local villages regarding the project. Nonetheless, the majority of these persons (67 percent) still desire additional information about compensation issues and procedures; the highest priority information request is for the amount and timing of the compensation that will be paid to the private owners. This information is being provided via the Guide to Land Acquisition and Compensation document, which has been widely disclosed and is being discussed in detail with affected people in advance of land acquisition via meetings with APLR. Secondary concerns include the environmental effects of the pipeline (especially in Borjomi district, in which there are spring water resources) and the various land use restrictions after construction is over. A relatively minor portion of the queries (7 percent) focused on available employment during construction and other benefits that may accrue from the project. See Chapter 7 for discussion of on-going consultation.

#### **4.11 LANDOWNERS WHO MIGHT BE DISPROPORTIONATELY AFFECTED BY THE PROJECT**

In the course of the preparation of the representative survey (October 2002) of affected plots, the size of each plot and the portion of it that would fall within the 44-meter pipeline corridor (or within the above ground permanent facilities) was calculated. A special subsequent survey was administered to those plot owners who will lose more than 30 percent of their affected land. The GIS data from which the sample was drawn showed that over half of the plots would be significantly affected on the order of having to relinquish at least 30 percent of the plot to the 44-meter corridor (264 out of 450 plots were sampled). This survey revealed the following:

- Most (75%) of the disproportionately affected plots are owned by men.
- The average age of the owners is 55.
- The owners rely heavily on the affected plot for their livelihoods and claim that 59 percent of their incomes derive from the affected land plots.
- About a third (34%) of these owners said that they probably would spend the money they receive from the compensation for their land within a short period of time; another third do not know what they will do with the compensation. Seventy-seven percent mentioned that they would try to save the compensation received and make sure that it is not wasted.
- As already mentioned, about a third of the disproportionately affected landowners did not know what they would do with the money they would receive for their land. Many different ideas were proposed by those who had some plans for the use of their cash compensation. Among these, 17 percent mentioned that they would try to buy land on which to build a home; another 8 percent expressed desire to make house repairs; 15 percent said they would like “to solve family problems;” 11 percent plan to save the income for unexpected household expenditures; 6 percent want to buy a car; and 4 percent want to use the money to pay debt. Others wish to give the money to their children or grandchildren (4 percent), get medical treatment (4 percent) or start their own business (4 percent).
- Survey participants were asked whether they would keep the money they receive for their land in a bank: 87 percent said they would not. A large majority of these persons do not believe in the banking system anymore.
- When respondents were asked whom they would trust with their money, 55 percent named themselves, 19 percent named their spouse, and 20 percent said they trust their children. In other words, over 95 percent of the surveyed landowners would not trust people outside their immediate family with the use of their compensation payments.

#### **4.12 LOCAL RESOURCES FOR PROBLEM RESOLUTION**

About half of (land) disputes and other problems in affected communities are referred for resolution to village elders and/or the Sakrebulo (elected council). Other, formal organizational sources for such recourse are either lacking or not known. Qualitative field interviews in October 2002 confirmed these findings. Many households also indicated that they do not belong to any local or national organizations, and ninety-four percent reported that there are “no functioning” organizations present in their village. Family and friends/neighbors are strong sources of support in matters involving disputes. The courts and police appear to be last resorts for problem resolution since, respondents claimed, there is “low trust” in the police, and there is “low judicial culture” in the affected areas.

Knowledge of the internal community social dynamics of PAPs as they relate to problem resolution and self-preservation is an asset that will be used by project staff throughout the course of mitigation proceedings. Overall, the populations living and working in areas affected by pipeline construction are highly self-reliant (turned inward socially). In solving their problems and meeting their needs, we can expect that their first recourse will be to their own community members, accessed through an informal network of relationships and cooperative arrangements. An expected

second avenue of recourse will be to their more formal (yet still within) community resources such as a village leader (village council member, mayor, regional governor) or the Sakrebulo itself (elected village council). Reliance on formal state-sponsored help resources (police, courts) can be expected to be shunned in favor of familiar, closer-to-home resources. By the same token, it can be expected that representatives of international organizations and agencies working directly with PAPs will have less success in cases of dispute resolution/mitigation. In any case, the Land Team, will remain the main point of contact for communities on property and land issues during construction, with project Community Liaison staff facilitating resolution of land related disputes and directing land issues to the Land Team. See Chapter 7 for more discussion of relative roles and responsibilities.

The project anticipates that despite the generally positive attitude of locals to the project at this point in time, given the land ownership and usage scenario detailed earlier, potential disputes and misunderstandings may arise. Some issues that are currently under consideration include:

- How effectively and efficiently disputes have been resolved by village leaders/Sakrebulos in the past.
- How effective/efficient local courts have been in resolving disputes in the past (aside from the trust factor, they tend to work slowly under the best of circumstances).
- How can local dispute resolution resources (those familiar to and with which people have a comfort level) be channeled to work with and on behalf of the BTC project and PAPs for mitigation.
- How micro-enterprise training networks can be put in place, anticipating that the smallest and poorest landowners and land users will be disproportionately impacted in the overall scheme of things.
- The probability that PAPs are more positive toward the project now than they will be later and, to this end, the importance of dispelling unrealistic expectations and fears in a timely manner.

When working out a plan for income restitution, the project has been mindful of the substantial role that land plays in the lives of affected communities. Some project affected people in Georgia will have to find a way to make their living without their land, even though this may last for only for a few years. Therefore, for a small group of PAPs, some unconventional solutions will have to be developed in order to help them regain their pre-project livelihoods.

Another important consideration concerns the design and implementation of income restitution and livelihood improvement programs, such as a community investment program. Whether the local institutions can play a strong role in managing the relevant efforts, and whether the people would continue to trust local leaders, are key issues that will be investigated during the early phases of RAP implementation.

## 4.13 IMPLICATIONS

The main findings and conclusions emerging from the two main RAP surveys and other complementary studies have been summarized at the outset of this Chapter. In what follows, some select implications of these are provided.

### 4.13.1 Overall Income Impacts

The Georgian section of the BTC pipeline will not cause physical resettlement because settlements and dwellings have been avoided in route selection and in the siting of Above Ground Installations (AGIs). It does, however, carry the potential to be disruptive for the livelihoods of a small but significant portion of the affected land owners/users who will lose a considerable part of their plot to the pipeline. To prevent these impacts and to compensate for the project's negative impacts, land acquisition prices are set at a significantly higher, premium rate than current land sale rates or the income people may expect to derive from the acquired land. In addition, it is expected that agricultural land will be returned to users with only a few use restrictions several months following construction. Therefore, cash payments for land comprise a serious boost for household incomes in affected areas of Georgia.

The average affected landowner in Georgia will:

- Lose about 11 percent of his/her income during the construction period;
- Through land acquisition, receive payment for their land plus an amount almost equivalent to their annual household income; and over a period of three years, more than twice their potentially lost income;
- Receive separate compensation for crops for 1 year, and full compensation for all assets on their land; and
- Receive back the use of their land at the end of the 3-year period, although with some restrictions.

In aggregate, it is estimated that affected households will lose, over a period of 3-years, the equivalent of \$4.5 million (with a 10% factor added to calculated losses). Land purchase cash payments for private land have been budgeted at \$5.5 million, with an additional amount of \$0.7 million set aside for purchasing severed land. In addition to cash payments for acquired land, the project will make the RAP Fund, in the amount of \$1.65 million, available for in-kind and investment guidance assistance to disproportionately affected households and those seeking guidance on how to utilize their money. Additional assistance will be provided as payments to Sakrebulo for the use of communal lands in the amount of \$0.7 million. This will cover grazing fees that they would otherwise be collecting from affected residents. The cumulative remunerative effects of the project, therefore, will be close to 70 percent higher than the estimated losses.

#### **4.13.2 Need for Continued Public Consultation and Disclosure Focus**

The consultation and disclosure activities of the project have spanned a year and maintained focus on land acquisition issues. Continued information needs have emerged from the RAP surveys and these are being incorporated into the ongoing consultation work, which will continue throughout the land acquisition and construction process (Chapter 7). The schedule of construction and land acquisition are provided in Chapter 2.

- There is still a general lack of public knowledge about formal land transfer procedures and necessary documentation. To both educate PAPs and assure timely implementation of the project, the Land Team and APLR are continuing in their efforts to inform the public. This includes an article on all the legal steps that APLR will publish in their Landowner newspaper. Additionally, APLR will, on behalf of the project, assist landowners to undertake the process of sub-dividing land.
- It continues to be necessary to dispel any prevalent unrealistic public concerns or expectations about project impacts in affected villages. The project will pay a premium for the purchase of private land plots. In addition, it will also provide premium compensation to users of land, even when they do not have legal rights to the land. Thus, the project will put greater emphasis on this issue and reduce highly elevated concerns or expectations. The monitoring of levels of satisfaction among affected communities will be an important element throughout project implementation.
- At present, known unwarranted fears and unrealistic expectations among PAPs are as follows:
  - i) Their land is worth more than the compensation offered;
  - ii) The project will make jobs widely available;
  - iii) The project will result in a wide network of new infrastructure in affected areas; and
  - iv) The availability of oil and natural gas supplies will increase in project impacted regions.

Efforts to invite modest expectations with regard to these and other emerging issues will continue to be addressed in all RAP consultation and disclosure efforts that will continue throughout the land acquisition process.

#### **4.13.3 Areas Requiring Immediate Focus of Study at the Outset of RAP implementation**

Two specific areas require more information at present. One of these is that of absentee owners. All absentee owners of project affected land parcels need to be identified, promptly located, and informed about the project's land acquisition activities. These persons will also be informed of their rights and obligations as landowners in light of project plans, and monitoring efforts will ensure that the entitlements of these owners, including receipt of compensation, are fulfilled. Once the relevant addresses are established, the absentee owners will receive the Guide to Land Acquisition and Compensation in two languages with a cover letter informing them of their rights and entitlements. A second area that requires more detailed information concerns the enterprises located on State lands and their relevant populations. The information collected thus far about these

populations is outlined in Chapter 6 (Section 6.14). Detailed information on these topics will be collected by early 2003.

#### **4.13.4 Need for non-cash Compensation**

It is important to note that the project has made every effort to avoid physical displacement or resettlement by avoiding settlement areas and dwellings. The project also aims to avoid such displacement that may be caused from extensive loss of productive assets, temporarily or permanently. For this purpose, it provides generous cash compensation to the PAPs. Nevertheless, there is an existing tendency for out-migration in some areas and PAPs from those areas may choose to follow suit with the cash compensation that they may receive. Others may not be able to use their cash compensation effectively. It is therefore important that the project provide non-cash support to the PAPs as needed. The purpose of the non-cash elements of compensation outlined in the RAP Fund (Section 5.9 and Table 9.1) are as follows:

- In-kind income is important for affected families. “In-kind” income is payment in the form of commodity or services, and not cash. Most PAP families maintain garden plots adjacent to their homes for self-production, or subsistence. It is probable, therefore, that assistance rendered in relation to intensifying agriculture on these plots will be beneficial toward mitigating for potential hardships and disturbances caused by the project.
- Livelihoods of vulnerable people will be affected. In some cases, project cash payments may not be adequate to sustain them over the 3-year project period. As such, vulnerable groups will be specifically targeted for assistance under the RAP Fund, which can provide supplementary non-cash assistance and can serve as a versatile source of help for such persons.
- Almost all families will welcome cash payments, as there is major distrust in the formal banking system. The project, however, through APLR, is encouraging the use of banks through educational materials on banking and the RAP Fund will provide investment guidance, including information on investing funds in banks, to affected land owners/users.
- An intangible benefit of the non-cash assistance provision will be to establish goodwill among the host populations, crucial to long-term pipeline operations and security.

#### **4.13.5 Use of the right of Eminent Domain**

The socio-economic surveys have revealed that, in most cases, people would be willing to sell their land at the price offered. However, one brief survey with some absentee owners in Tbilisi found that some absentee owners may be unwilling to sell their land. Similarly, there is a chance that some landowners may be deliberately delaying selling their land for various reasons. Some of these reasons include:

- Perceptions that portions of lands remaining after acquisition will be uneconomic;
- They may not want to part with their land at all;
- They may be holding out for higher prices for their land, and

- They may harbor other demands from the project.

In such circumstances, the feasibility of changes in the pipeline route will be considered. If such changes are not feasible, additional attempts will be made to re-negotiate. If re-negotiations are not successful, BTC Co may have to use the right of Eminent Domain and expropriate the land (Chapter 3).