Resettlement and Migration in Post-Soviet Dagestan

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Abstract: This paper investigates migratory patterns in the North Caucasian republic of Dagestan. It relies on prior literature, both in Russian and English, to establish the basic form of migration in the republic and recent census data to describe these patterns. The authors then analyze responses from a December 2005 survey of Dagestani residents about their migration intentions to investigate the motivations underlying these patterns. The paper investigates the extent to which economic incentives vis-à-vis other traditional assumptions associated with migration theory maintain in the case of Dagestan, and explores the impact of migration on interethnic relations in the republic. Journal of Economic Literature, Classification Numbers: I30, J61, O15, O18. 2 figures, 7 tables, 47 references. Key words: Dagestan, migration, interethnic relations.

The dissolution of the USSR led to the redefinition of economic and political structures in the post-Soviet space and in the North Caucasus, a transition complicated by nationalist tensions and the conflicts (1994–1996 and 1999–) that erupted in Chechnya and its immediate surroundings. The Chechen wars led to increasing fears of further nationalist mobilizations and separatism, along with concerns about the potential politicization of Islam and the rising influence of radical Islamic groups. The republic of Dagestan has been frequently discussed in relation to the spread of nationalist and religious mobilizations. Sandwiched between the Caspian Sea and Chechnya and with the largest Muslim population in Russia,

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2All places mentioned in this paper are identified in the location maps in the preface of this special issue of Eurasian Geography and Economics.

3This is the case either in terms of absolute size or percentage share of the population. Inasmuch as religious affiliation per se was not enumerated in Russia’s 2002 census, readers should consult Heleniak (2006) for a discussion of methodological issues in the enumeration of Russia’s “ethnically Muslim” population.
this geographic and demographic relevance provides the underlying justification for studies of the region. Home to 34 major ethnic groups (Ware and Kisriev, 2000), Dagestan is the most ethnically diverse of Russia’s 21 ethnic republics. In addition to spillover from the Chechen conflict, the presence both of a corrupt, clan-based regional government and the lack of economic development have further afforded challenges that could destabilize the republic. In sum, Dagestan has drawn scholarly attention, mostly from political scientists, due to its geographical location, prominence of the religious dimension, and geopolitical significance (e.g., Ibragimov and Matsuzato, 2005).

Relatively few studies of Dagestan, however, have diverged from the interrelated topics of political Islam, national identity, and post-Soviet political stability. This paper takes a different direction, exploring the nature of migration in Dagestan. Migration throughout Russia, and especially its southern regions, is a particularly dynamic phenomenon, as recent processes of economic and political change have affected both the motivations to migrate and networks within which it occurs. In addition, while the literature on migration in Russia has investigated country-wide patterns, little work has been done to analyze republic-specific networks. Dagestan, for example, is one of the major sources of internal migrants in Russia. At the same time, there is significant movement within Dagestan, as migrants leave mountainous areas in the south and west of the republic for economic opportunities available in its cities clustered along the Caspian Sea. Furthermore, we will argue that migration is an important social factor that affects ethnic relations and political processes in Dagestan. Therefore, ethnic-specific migration processes have implications for the future political and social stability of the republic.

The initial part of the paper relies on locally situated scholarship, drawing heavily on decades of work on the Soviet and post-Soviet movements of peoples from mountains to coastal areas and from rural locations to cities. To understand the broader patterns of migration in the republic, specifically in the urban-rural context and to supplement this aggregate data analysis, we use recent censuses and local research to understand the historical patterns that help explain particular forms of migration. Finally, we present a quantitative analysis to interpret the results of a December 2005 survey carried out in Dagestan by John O’Loughlin and colleagues to substantiate and understand the personal motivations underlying the aggregate trends of this preliminary work.5

SOCIAL PROCESSES IN DAGESTAN

Prior to 1917, only cursory research was carried out on the populations of Dagestan, typified by ethnographic expeditions sponsored by the imperial Russian Geographical Society (Anuchin, 1884; Dirr, 1903). Early works during the Soviet period covered an array of geographical topics, and were the first to explore broader patterns of settlement in the rural areas of the republic. Much of this research was intended to promote the region’s economic potential, especially the importance of agriculture in the rural economy. In the 1960s, Soviet scholars first linked the economic changes associated with industrialization to population movement within Dagestan (Khashayev, 1961). These discussions related industrialization...
and urbanization to patterns of migration and resettlement, and formed the foundation for works that appeared during the following decade examining such movement in the republic. Two stand out in particular. In *Geografiya naseleniya* (1973), K. P. Sergeyeva presented a complex analysis of resettlement patterns in Dagestan, taking into account the historical and geographic differences between mountains and plains. V. F. Aliyeva’s (1975) book was the first regional analysis of urbanization processes.

Soviet-era research, however, rarely analyzed problems associated with population resettlement, including the coercive nature of Soviet policies and the demographic changes and resulting tensions following migration of mountain peoples to the plains, a territory that historically had been occupied by other distinct ethnic groups (Polian, 1988). First during *perestroika*, and subsequently since the dissolution of the Soviet Union, Russian scholars have responded to the challenge of analyzing problems associated with processes of resettlement and migration in the Dagestani space (Eldarov et al., 2001; Muduyev, 2002; Aliyev, 2005). Among these scholars, the general agreement is that migration and resettlement have been influenced by the interaction of economic and socio-cultural processes (e.g. industrialization and urbanization). Analysis of the resulting resettlement patterns for mountain populations from 1979 to 2002 shows that these groups have maintained many characteristics first discussed by Sergeyeva (1973), especially the trend of migration from mountains to plains, resulting in the accelerated depopulation of mountainous areas.

The literature on Dagestan in English has expanded significantly since 1991. Of particular interest has been the influence of radical Islamists, in the form of Wahhabis and radicalized Chechens, on the political situation in Dagestan (Akhmadov et al., 2001; Ware et al., 2003). Such research is situated in the broader study of Islam in Russia, which is of growing interest for a number of reasons, most notably the demographic increase of Muslim populations relative to the declining number of ethnic Russians (Walker, 2005). Focusing specifically on Dagestan, Ware et al. (2003) connect radical Islam to both Dagestan’s geographical location and economic and political conditions. They hypothesize that the economic and political dissatisfaction found in Dagestani society, compounded by geographic location, could potentially engender support for such radicalism. Their survey and interview work, however, finds weak support for this linkage. The influence of Russia has served to mitigate such support; Ware et al (2003) find that most citizens of Dagestan view Russia favorably. Local elites have also opposed any form of radical Islam, support for which they see as stemming from a variety of causes. Implicit in this opposition is the political threat that Islam poses to the power base of the elites (Yemelianova, 1999). As a response, the Dagestan regional government outlawed Wahhabism in 1999, a move that does not match calls for political moderation in dealing with tensions at the intersection of politics and Islam (Malashenko, 2000). More significant than this political posturing, public support within Dagestan for Wahhabism has declined for a number of reasons; Yemelianova (2001) specifically cites the entrenched position of Sufi beliefs within Dagestani society as offering a kind of inoculation to radical Islam. In sum, while the literature on Islam in Russia has considerably expanded in the past decade, in Dagestan such analyses have taken on a particular importance because of the region’s geographical location on the borders of Chechnya and economic and political factors, including the 1999 attempt to build an Islamic political entity across the republics’ borders, that threaten to destabilize the multi-ethnic republic.

Dagestan’s ethnic heterogeneity has also been discussed in recent work, with a particular focus on the relationship between this diversity and the republic’s relative political stability, again in comparison to its neighbors. Ware and Kisriev (2001, p. 106) believe that “Dagestani society’s intricate ethnic structure . . . has inhibited conflicting elements from
taking radical steps.” They contend that although Dagestan has experienced growth in ethnicity-based organizations and the development of a democratic system, the overarching political trend has been toward the reification of djamaats, or territorially and historically centered villages, which subsequently serve as the foundation for ethno-political organization (Ware and Kisriev, 2000). According to Ware and Kisriev (2001, p. 110), these groupings transcend “both kinship and ethnic structures,” thereby providing a foundation for a secure and stable political structure. The prior literature on the form of Dagestan’s political system, and, significantly, the manner in which ethnic groups organize politically, has underscored the importance of this djamaat system in mitigating centrifugal forces in the republic.

Other studies have touched on the role of economic development, both in the historical and present-day contexts. The resettlement policies pursued by the Soviets restructured inter-ethnic relations in Dagestan, complicating both Islamic politics within the territory and intensifying competition among the nationalities that were now territorially competitive and mixed (Matsuzato and Ibragimov, 2005). In the post-Soviet period, increased economic development has been explicitly connected to continued political stability (Ware and Kisriev, 2002). Such growth has proceeded in fits and starts; industrial production is increasing and infrastructure, particularly in the form of highways and hydroelectric facilities, has been slowly developed. The republic’s capital, Makhachkala, is an important link in the transport of hydrocarbons (oil and gas) to Russia from the eastern Caspian Sea, especially Turkmenistan. Federal subsidies were also increased following the start of the second Chechen conflict (Ware and Kisriev, 2002). Yet, development in Dagestan is weakened by the presence of a “shadow” economy and high-level corruption. Low levels of employment, in particular among urban youths, promote crime. The economic situation, with all its uncertainty, thus continues to affect prospects for political stability in Dagestan.

The tenuous nature of Dagestan’s economic position also serves to influence migration patterns. In the wider literature, migration has frequently been viewed as a logical personal decision to leave a region because of adverse economic conditions. On a fundamental level, population in-movement is theorized as a response to the economic opportunities generated by labor markets, and associated regional variations in earnings potential due to wage differences or employment availability (Ritchey, 1976). With specific reference to the post-Soviet space, prior research has questioned the relevance of this market-based motivation for migration, primarily due to the continued regulation of migratory and labor market networks, the state’s limitation of access to social services and residency opportunities, and the swift contraction of the Russian labor market during the years of economic transition in the early 1990s (Mitchneck and Plane, 1995; Gerber, 2002). More recent work by Gerber (2006), however, finds that variation in wage and employment levels influences migration patterns in the Russian Federation, substantiating the relation between labor markets and population movement.

Disparity in the labor market and associated variation in economic opportunity can be connected more generally to the role that declines in traditional agricultural economies play in migration. Such declines, when compounded with population growth, are classic examples of “push” factors, which serve to instigate migratory flows (Deshingkar and Grimm, 2004). At the same time, economic development, specifically the increase of industrial production and other employment opportunities in metropolitan areas, serve to “pull” populations away from rural areas (Deshingkar and Grimm, 2004). Although operating at a much different (regional) scale in Dagestan than conceptualized in the literature above, this interplay between rural, agrarian populations and developing areas, whether located near urban centers or situated in more rural parts of the republic, is central to migration in Dagestan.
FACTORS INFLUENCING RESETTLEMENT

Within any migration system, macro-level economic processes affect individual-level decisions about moving. Yet, political and social factors often also play an appreciable role in migratory patterns as well. Zayonchkovskaya (1999) has identified five such causes that specifically influence migration in the post-Soviet context, and which provide a basis for our analysis of migration in Dagestan: societal liberalization, social destabilization, economic reform, the development of the market economy, and socioeconomic roles in the new state. The post-Soviet geopolitical situation in the North Caucasus, the increase in the titular and other (non-Russian) ethnic populations in Dagestan, and the economic opportunities available in both rural and urban areas in the republic have all affected migration. As background for the discussion, we first briefly analyze the territory’s physical environment and its effect on population distribution and movement.

Physical Environment

Dagestan’s physical geography is a study in contrast. The precipitous mountains that comprise the Great Caucasus Range are juxtaposed against the plains in the northern part of the republic and along the Caspian coast (see Fig. 3 in the preface to this issue). Moreover, whereas the river valleys are fertile, much of the northern steppe beyond these watercourses is semiarid to arid, significantly limiting settlement locations. Dangerous natural hazards, such as earthquakes, landslides, avalanches, flooding, and coastal and fluvial erosion, all of which are common in this varied topography, also have influenced population movements.

The republic is clearly divided into two settlement zones, the mountains and the plains. More than half of the republic is mountainous. Rural populations living above 1500 meters are steadily declining, while the populations in administrative centers and the republic capital of Makhachkala are growing significantly. According to the 2002 Russian census, only 16.2 percent of the population resides at elevations greater than 1500 meters.6

Rivers and river basins have played a determining role in the pattern of resettlement from mountains to plains. The size of settlements in Dagestan often depends on access to arable land suitable for agricultural development. Settlements distant from riparian zones must rely on underground sources of water, such as artesian wells.

Natural hazards are also important in shaping both voluntary and forced patterns of resettlement in Dagestan. First and foremost, the after-effects of natural catastrophes significantly complicate farming practices throughout the republic, thereby limiting growth. In response, the government has explicitly supported specific resettlement strategies. For example, as a result of a significant earthquake in March 1970, a number of villages in Kumtorkala Rayon were destroyed. The Soviet government subsequently underwrote the reconstruction of the rayon center, Kumtorkala, which was designed to house those from rural areas of the rayon displaced by the disaster. In addition, since 1978, the level of the Caspian Sea has risen more than 2 meters, inundating a number of settlements in the northern portion of the republic.7 Given the structure of political organization in Dagestan, centered on the ethnically

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6 Prior to 1991, high-elevation settlements received increased levels of compensation from the Soviet state, similar to communities located in the peripheral northern territories of the USSR. With the end of much of this state support, the percentage of the population living in urban zones and on the plains (where economic opportunities are more prevalent) began to grow rapidly.

7 These include settlements on Ostrov Chechen’ (Chechen Island) whose population was transferred to apartment complexes in Makhachkala at the beginning of the 1990s (Eldarov, 1995).
mixed *djamaats* (see above), resettlement associated with natural processes has not significantly destabilized interethnic relations in the republic (Kisriev and Ware, 2000; Ibragimov and Matsuzato, 2005).

**Geopolitical Dynamics**

During the post-Soviet period, geopolitical factors have played an increasing role in influencing patterns of resettlement and migration in Dagestan. The breakup of the Soviet state brought about a change in the status of the Dagestan administrative borders with Azerbaijan and Georgia, as these former Soviet republics became independent. Many economic and social connections between Dagestan and these states that had been maintained during the Soviet period were prohibited after 1991. For example, the solidifying of international borders isolated transhumance pastoralists in Dagestan from their winter pastures in Azerbaijan. This has resulted in alterations of traditional herding routes, overgrazing in the piedmont and coastal plain, and a general decline in the productivity of animal husbandry, which serves as the primary livelihood for many mountain residents (Radvanyi and Muduyev, 2007, this issue). The internationalization of borders has also had a social effect on rural populations; free cultural and communal exchanges between frontier areas are proscribed. These linkages, in areas where infrastructure is practically nonexistent, previously served as important forms of interaction for mountain villages.

Along the administrative border with Chechnya and the international frontier with Georgia and Azerbaijan, a number of military installations have been established, increasing the labor opportunities in some frontier villages in such activities as road construction and the development of infrastructure for electricity and resource extraction. The federal government wants to support development of these marginal and strategic zones, especially for security purposes.

In 1992, the First Peoples Conference of Dagestan supported a plan for the rehabilitation of Chechens in their traditional homeland in the western foothills of Dagestan. Because the predominantly Lak population would be displaced by the returning Chechen population, the Conference also passed a resolution, subsequently endorsed by Moscow, supporting the resettlement of Laks from Novolakskiy Rayon to a residential suburb of Makhachkala. The resettlement process was halted, however, following the incursion by Chechen rebels into Novolakskiy in 1999, when ethnic Lak opponents of the transfer were among the casualties. Other areas where Chechens have migrated include the municipal districts of Khasavyurt and Kizlyar, where there have been conflicts regarding territory and land use. The situation in the villages of Leninaul and Kalininaul in Kazbekovskiy Rayon has been especially strained as of late.

The particular traditions of the republic’s constituent minorities have strongly influenced how these groups integrated into the market economy and responded to the formation of a post-Soviet ethnopolitical structure. Those native nationalities who were active in informal secondary markets (despite their then-illegality) as traders, vegetable producers, and craftsmen during the Soviet period were more successful in adapting to the capitalist system following the USSR’s disintegration. More specifically, the Dargin, Kumyk, and Azeri

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8This territory was first incorporated into Dagestan during the 1920s, when it was annexed to the republic from Chechnya (Gammer, 2002). Following the deportation of the Chechen minority in 1944, Lak and Avar populations were forcibly resettled in this rayon (then named Akinskiy, subsequently renamed Novolakskiy) from their native *auls*, or mountain villages, which were subsequently destroyed (Gammer, 2005).
populations integrated into the market economy more successfully than the Avar, the largest ethnic group in the republic and with traditional ties to the high mountains, which had dominated the economic and socio-political life of Dagestan prior to perestroika.

Leadership change at the top of the republic’s ethnopolitical structure also has served to influence territorial priorities regarding economic development. In February 2006, Magomed Magomedov, an ethnic Dargin, resigned his position as Chairman of the republican State Council and de facto president of Dagestan and was replaced by Mukhu Alieyv, an Avar, who was named the official president of the republic. After the leadership change, a plan for constructing roads toward Avar settlements in the mountains was implemented. Ostensibly, as reflected in public statements, this infrastructural development is designed to support border outposts along the republic’s boundaries with both Chechnya and Georgia. Nonetheless, developments such as those described here have affected the fragile balance of power between ethnic groups, particularly between the Avars and the Dargins, the two largest and most influential groups in Dagestan’s political system (e.g., see also Kisriev and Ware, 2005).

Demographic Development and Resettlement

The dynamics of migration and settlement in any territory depend fundamentally on population growth. The overall population of the Russian Federation has declined over the past 10 years, whereas the population of Dagestan has continuously increased due to high birth rates. Heleniak (1997), studying pan-Russian migration trends between 1989 and 1996, noted that Dagestan was one of only three territories in the Russian Federation with a birth-rate above replacement level for the period. Of these three units, Dagestan’s fertility level was the highest. Currently, the highest rates of population growth in the republic occur among the 10 “native” ethnic groups: Avars, Dargins, Kumyks, Lezghins, Laks, Tabasarans, Nogays, Rutuls, Aguls, and Tsakhurs. Population decline has been recorded recently in only two ethnic groups, the Russians and the Tats (Mountain Jews). Non-native groups accounted for one-third of Dagestan’s population in 1959, but only 9 percent according to the 2002 census. Decrease among of these populations is attributable both to low birth rates and to out-migration from the republic to other regions of Russia or, in the case of the Tats, abroad to Israel and the West. Turning to the Russians more specifically, in 1999, there were 30 percent fewer Russians in Dagestan than in 1959 (Muduyev and Eldarov, 2002). The exodus of Russians began first in the 1960s, accelerated during perestroika, and continued following the breakup of the Soviet Union, mirroring the high out-migration of Russians from the countries of the Near Abroad.

Significant change in the ethnic geography of the North Caucasus occurred in the mid-1950s, and involved the simultaneous out-migration of ethnic Russians from their historical (lowland) settlements and the repopulation of these areas by native nationalities. Nearly 300,000 people from Dagestan’s mountains resettled in the republic’s northern plains between 1950 and 1970. According to the 1959 census, administered during the highest flow from mountains to plains, the population of Kizlyar Rayon was approximately 44,000, and composed almost exclusively of ethnic Russians. By 1989, the population had grown by 4,000 residents; however, the ethnic composition of the rayon had changed significantly. Of

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9 Of the 14 ethnic groups identified in Dagestan as titular, 10 were considered native as of 1989 (the four titular groups considered “non-native” are Russians, Azeris, Chechens, and Tats; see Walker, 2000).
the 48,000 residents, there were 14,000 Russians, an equal number of Avar, and 7,000 Dargins.\textsuperscript{10} Similar waves of migration by mountain populations occurred in the other ethnic republics of the North Caucasus during the same period.\textsuperscript{11}

Such migration has reshaped the internal demographics of Dagestan. In 1959, 21 percent of the republic’s 11 officially designated native nationalities lived outside of Dagestan proper. Between 1959 and 2002, the total population of these groups doubled in Dagestan, whereas in the rest of Russia, their population totals increased fivefold. Part of the explanation is that more than 170,000 people, or 15 percent of these native populations, left Dagestan during this period, compared with Russian out-migration of approximately 22 percent. The economic problems associated with transition, in addition to the events in Chechnya and the general political and social instability in the national republics of the North Caucasus, have thus strengthened motivations for out-migration among both Russians and native groups. The preferred destinations for migrants were the surrounding territories with predominantly Russian populations: Krasnodar and Stavropol’ krays and Astrakhan’, Volgograd, and Rostov oblasts. These regions are characterized by greater stability, both socially and economically, than the national republics to the south. In sum, demographic pressures affect both native and non-native groups alike.

In the plains and piedmont, settlements have taken on a distinctively polyethnic character. For example, a large number of Avars, Dargins, and Kumyks have resettled in the northern part of Dagestan, an area traditionally inhabited by the Nogays and more recently colonized by Russians. Such ethnic diversity is strikingly apparent in Babayurt Rayon, often considered the granary of Dagestan, due to the planned resettlement of the Soviet period. Along the coastal plain and in the mountains of southern Dagestan, particularly along the border with Azerbaijan, it is now difficult to find any mono-ethnic settlements.\textsuperscript{12} The traditional ethnic structure of these areas, composed of Lezghins, Azeris, Tabasarans, and Tats, changed significantly during the last century, with an influx of Russian, Kumyks, Avars, and Dargins. In the past 10 years, members of both non-native groups and native groups previously living in other parts of Dagestan have begun migrating to the area.

**Rural Population Dynamics**

Among the regions of Russia, Dagestan stands out for the predominantly rural nature of its population. Only 43 percent of Dagestanis live in urban areas. This percentage is low compared both to the North Caucasus as a whole, where 55 percent of the population is classified as urban, and to the Russian Federation as a whole, where 73 percent live in urban areas. Only the sparsely populated Altay Republic and a number of northern autonomous okrugs have significantly higher proportions of rural residents.

\textsuperscript{10}Avars and Dargins are traditionally identified as mountain peoples.\textsuperscript{11}In addition, starting in the 1970s, the mountain peoples of Dagestan began to migrate beyond the borders of Dagestan and the other ethnic republics of the North Caucasus, to neighboring Stavropol’ Kray and Rostov Oblast. In particular, mountain peoples actively moved to Stavropol’ Kray; between 1979 and 1989, the Dargin population doubled there, while the number of Avars increased by a factor of 2.5. These migrants concentrated in the eastern portion of the kray, near the border with Dagestan (e.g., see O’Loughlin et al., 2007, this issue).\textsuperscript{12}However, assessments of ethnic heterogeneity often vary in terms of scale. At the local level, in some cases one encounters an irregular mixture of farms, the owners of which belong to different nationalities. Thus a pattern of ethnic segregation is visible across these farm units.
The rural nature of population distribution in Dagestan is clearly shown on a map of the republic’s population density (Fig. 1). At 44 people per km², the republic’s population density is about five times the mean for the Russian Federation, but considerably below that of neighboring republics in the North Caucasus.¹³

Currently, the highest densities occur in the urbanizing rayons bordering Chechnya: Novolakskiy (102 persons/km²), Khasavyurt (83), and Kizilyurt (109). These demographic

¹³Dagestan is the twenty-third most densely populated territory among Russia’s eighty-nine constituent units.
trends are affected both by high birth rates and active in-migration from other parts of Dagestan and neighboring Chechnya. The lowest population density is found in Nogay Rayon (2 persons/km²) in far northern Dagestan, a predominantly rural, steppe area devoted to grazing. As illustrated in the map, densities also are low in the high mountains of the south.

Although the absolute number of rural residents has grown over the past century, the percentage of Dagestan’s population residing in rural areas has steadily declined (see Fig. 2). In part this is due to the Soviet policy of eliminating the smallest villages and consolidating their populations in larger rural settlements that would be easier to maintain (i.e., economies of scale in building roads, bridges, and other forms of infrastructure). In a similar vein, Soviet agricultural policy was oriented toward large-scale mechanized farming, which similarly disadvantaged smaller agricultural producers.

**Rural Population Change by Rayon.** For the mountainous regions of the republic, specifically the auls that rely on local production, cultural factors have played an important role in influencing migration. In the mountains, farmland is divided, often through terracing, between separate families; farm work is relatively small in scale, and performed primarily by family members. The small plots of cultivatable land and the lack of lower-elevation winter pasture limit the ability of mountainous areas to adequately support residents. Part of the rural population therefore migrates to the cities, while others resettle in nearby towns.

As a whole, the rural population is particularly focused around rayon administrative centers, which serve as economic and social hubs for the surrounding communities. Beyond these rayon centers’ spheres of influence, some 700 small rural administrative centers are important links for Dagestan’s population. Together with the former state farms, numbering more than 700, they constitute one base for rural settlement. The new types of farm units introduced during Russia’s economic transition, including private (peasant) and corporate farms, have not as yet had a significant impact on the distribution of rural population in Dagestan.

Embedded within general trends are resettlement patterns that characterize specific rayons or sections of the republic. In southern Dagestan settlements along the lower Samur River, and in particular in Magaramkent and Derbent rayons, are foci for in-migration due to favorable local climatic conditions that are conducive to high agricultural yields (Fig. 2). However, resettlement has accelerated the deforestation of unique liana forests of the Samur River delta. Under present rates of deforestation, that vegetation community will disappear in another 10 to 15 years.

Farther north, in west-central Dagestan, a local system of rural migration has emerged, centered on the villages of Botlikh and Untsukul. In the 1980s, this area was the site of a military-industrial manufacturing facility, and in 2005, the village of Botlikh was selected as the site of a new military installation. In Untsukul’ Rayon, located closer to the plains, a chain of hydroelectric power stations is being constructed on the Sulak River, attracting migrants from rural parts of the republic.

On the plains of northern Dagestan, the development of large-scale breeding of livestock has led to the establishment of number of kutans (temporary herders’ settlements). At a

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14However, this region is growing, as one of the main areas of resettlement for mountain populations and forced migrants, as noted above, and also is experiencing significant natural increase due to high birth rates among the ethnic Nogay population.

15The district has also played an increasingly important military role in the conflict in Chechnya, as it is situated on a route leading to a mountainous section of the Russian-Georgian border, protected by Russian border guards to prevent external support for Chechen separatists from locations such as the Pankisi Gorge in Georgia (see Fig. 2 in the preface to this special issue).
number of these settlements, herdsmen are starting to live year-round. The transformation of kutans into permanent settlements thus creates a new type of rural population center that in turn may serve as a magnet for additional migrants.

Urbanization Trends

During the 20th century, urbanization in Dagestan proceeded rapidly, increasing from less than 10 percent of the population (7.8 percent in 1897, climbing to 42.7 percent in 1989; see upper right portion of Fig. 2). During perestroika and the transition years of the early 1990s,
the rate of urbanization leveled off and even briefly declined, yet more recent figures indicate that urban in-migration is increasing once again. Associated with this increase is the rise of regional population centers, focused on the three largest cities of Khasavyurt, Makhachkala, and Derbent. It is thus possible to delimit around these centers three main regional (northern, central, and southern) systems of resettlement in Dagestan (Muduyev and Eldarov, 2002).

Khasavyurt, with a population of more than 120,000, has emerged as the center of the northern network of migration and resettlement. Many migrants (mostly Avars) have arrived from the western mountains of southern Dagestan. In addition to Khasavyurt, settlers are continuously moving into the nearby city of Kizilyurt, and the surrounding rayons (Kizilyurt and Khasavyurt).

Makhachkala, with its satellite city of Kaspysk and eight other nearby towns, is the main migration node for practically the entire republic, thanks to the recent development of transportation infrastructure in the republic. New infrastructure has also strengthened the role of Buynaksk, the historical capital of Dagestan now serving as a focal point for the development of hydroelectric resources along the Sulak River.

Migration in the southern region of Dagestan has focused on the growing social and economic hub of Derbent, an ancient city (the oldest in Russia) with a UNESCO World Heritage site based on the Naryn-Kala Persian fort dating from 800 BCE. The smaller cities of Izberbash and Dagestanskiye Ogni function as hubs for lesser regional networks of population movement.

Population movements from rural and mountainous to urban and plains/coastal locations embodied in the increasing urbanization in the republic has promoted the development of a pan-Dagestani identity among residents in increasingly mixed ethnic communities. Self-identification as a Dagestani—rather than an Avar, Kumyk or Lezghin—is common among those who live and work in the cities, whereas those who remain in the countryside, particularly in the mountains, tend to maintain their specific ethnic identity. Thus we argue that migration and resettlement—whether influenced by natural factors, geopolitical events, or demographic changes—have promoted ethno-political stability in the republic.

Accompanying the increased mixing of peoples in Dagestan, however, has been a widening economic divide between residents of Makhachkala and those in rural (particularly mountain) regions of the country. The catalyst for increasing economic inequality has been the establishment of a market economy, the absence of stable finance and credit systems, and the pervasive presence of an informal "shadow" economy. The next section of the paper investigates these general patterns further, relying on the results of the December 2005 survey noted earlier.

METHODS AND DATA

In order to obtain a clearer picture regarding the nature of resettlement in post-Soviet Dagestan, we examined responses focusing on migration in a public opinion survey carried out by O’Loughlin and colleagues in Dagestan in December 2005. The survey was

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16The completion of a highway and tunnel through the Gimry Ridge has significantly reduced travel times between the mountains and the capital.

17Prior surveys in the republic by Western researchers, most notably by Ware et al (2003), had focused on ethnic identity, political mobilization, and Islamic religious beliefs. By contrast, the December 2005 O’Loughlin et al. survey did not emphasize the religious component, but rather focused on the ethnic and political consequences of the conflict in Chechnya, as well as collecting demographic and migration information.
conducted throughout the North Caucasus, with a total sample size of 2000, and consisted of 81 questions with 120 component parts. In Dagestan, the survey was administered to 625 adults over the age of 18 in 26 urban and rural sampling points. The survey was stratified by ethnic group in each republic; the ethnicities of respondents in Dagestan very closely reflect the national composition of the republic as a whole, as shown in the 2002 Russian census.

Modeling Migration Intentions and Behavior. To uncover patterns and processes regarding migration in Dagestan, we selected three survey questions focused on population movement. The questions were: (1) If you had the opportunity to move to another rayon or community in the next two years, would you do so? (2) If you could move, where would you like to move? (3) Why would you like to move? The first question was asked for each survey participant (\(N = 625\)); 220 respondents (35 percent) indicated that they would be very likely or likely to move, while 61 percent replied that they would not move in such a circumstance.\(^{18}\) The subsequent two questions were posed only to those who indicated that they would move if given the opportunity. We note that these answers indicate intention to move; therefore, this work is analyzing individual-level preferences and motivations, but not actual movement. We recognize the limitations of our statistical sample, as well as the intent associated with our questions, and realize that our analysis is limited specifically to migration patterns in Dagestan.

We subsequently recoded the responses for each of the selected questions. For the first question, we maintained the inherent ordinal progression of the responses; from “definitely not likely” to “very likely” to move if presented with that opportunity. The “don’t know” answers were dropped because of their ambiguous nature. This did not adversely affect sample size, reducing it only from 625 to 604. For the subsequent two questions, we recoded the responses so that they were binary coded. Each of these questions addresses specific theoretical issues raised in the prior research on both migration and Dagestan. First, migration motivation, as indicated in the literature, is closely linked to the availability of better economic opportunities. While a range of reasons was given for moving, including issues of personal safety and motivations to live with fellow co-ethnics, we chose to focus on the economic situation given this theoretical basis, and therefore recoded responses to this question so that we identified only those who indicated that their motivations for migration were economic. Of the total (\(N = 220\)) who responded that they would be very likely or likely to move, 76 percent indicated that they would move in order to improve their material situation. Migration destination was then recoded as preference to move either within Dagestan, or to areas outside of the republic; 44 percent responded that they would like to remain in the republic if they moved. As we are addressing migratory patterns within the republic, and because given the nature of our sample sizes we focused on the five largest native ethnic groups, we wanted to examine how much each of these groups prefers to remain in the republic.\(^{19}\) For these latter two questions we kept the “don’t know” responses; these respondents were motivated to move, but (potentially) had not thought through their specific reasoning or destination after migrating.

Dummy variables were created for each of the five largest ethnic groups. By creating dummy variables for each of these groups, we can make comparisons between the selected populations and the rest of the sample as a whole, but not between specific groups. As

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\(^{18}\)Only 3 percent responded “don’t know.”

\(^{19}\)We limited the examination to the five largest groups—Avar, Dargin, Lak, Kumyk and Lezghin—because each had more than 55 respondents in the Dagestan sample; for smaller groups, the samples are not large enough for reliable statistical analysis.
previously mentioned, given the number of respondents in the survey, disaggregation by all ethnicities reduces sub-sample sizes too much. We were therefore unable to explore patterns of migration among other potentially interesting populations, including the Chechens, Russians, Azeris, and Tats. The ethnicities with smaller sample sizes were therefore grouped together and served as the control group.

In addition to the limitations of the statistical sample, these five groups were selected on a theoretical level because when aggregated these five populations are representative of the varied, and often nuanced, trends affecting migration within the republic. The Avars and Dargins, both originally mountain peoples, have resettled in significant numbers on the plains. The Kumyks, who traditionally lived on the plains and in the foothills, have been forced to deal with increased crowding and economic competition with the influx of migrants from the mountainous regions. The Lezghin population, which is settled in both northern Azerbaijan and the southern part of Dagestan, has had to adjust to the social and economic cleavages and border dislocations brought about by the breakup of the Soviet Union. The Laks were victims of large-scale, forced resettlement in 1944 from their traditional mountain auls to replace the Chechens deported from the rayons on the border with Chechnya, and have occupied an uncertain position since calls for the resettlement of displaced Chechen populations in the early 1990s. In sum, each of these five populations has been subject to distinct and influential migration processes since resettlement was first initiated by the Soviets in the 1920s.

To examine the responses of various socio-demographic groups to migration intentions and to serve as controls, we carefully chose variables on the basis of theoretical expectations. Gender was included (female 1; males 0) and urban-rural residence was recoded as urban 1, rural 0. In the sample, the proportion of urban to rural respondents was 40 percent to 60 percent, close to the actual (2002 census) proportion of 43 percent to 57 percent in the republic. Material status (income available) was recoded as a continuous variable, with a response of “We do not have enough money to provide food” coded as 1, “We only have enough money to provide food” coded as 2, “We only have enough money for food or clothes” coded as 3, to a coding of 4 for the response “We can purchase everything we need.” Responses to the question “What is the highest level of education attained” were reclassified into three categories: high school equivalent or below; professional technical training; or some/completed university. Pensioner status was recoded as a dummy variable, with pensioner = 1. Its function is twofold, serving to capture effects associated with employment status and acting as a surrogate for age.

ANALYSIS OF MIGRATION INTENTIONS

Using the Stata 8.2 statistical software, we constructed categorical regression models for each of the questions. To interpret the regression results in a straightforward manner, we used the public domain software package CLARIFY, which is designed for use specifically in Stata (King et al., 2000; Tomz et al., 2001). CLARIFY uses Monte Carlo simulation to ease the interpretation of quantitative outputs, without requiring any change to the underlying regression model (Tomz et al., 2001). After constructing and running our regression models, CLARIFY was first used to identify the baseline for each regression model. The tables report the probabilities for the identified predictor when all of the other predictor variables in the model are set at their mean values. We focus in our study on the effects of our primary independent variable, ethnic membership. We only report statistically significant values.
Model 1: Modeling of Intention to Move

For this model, ethnic identity served as our primary independent predictor because nationality as a form of identity in Dagestan is both politically cultivated and spatially reinforced. The Soviet government established 14 official nationalities among the republic populations, a classification that includes the five populations in our statistical analysis (Gammer, 2002). Moreover, the Soviet system reified national identity spatially by granting geographically defined administrative areas to each ethnic group (Walker, 2000). Given the presence of these de facto homelands in the republic, ethnicity can be used as a correlate for understanding migrations from the ethnically segregated mountain areas to the diversely populated plains.

We first compared responses to the question on migration motivation to the responses with respect to ethnicity, to develop a preliminary understanding of migration patterns among the selected nationalities (Table 1). From the crosstabulation, we predict that Dargins and Lezghins are not likely to move, while Lak populations are more likely to migrate. An ordered probit model was then used to analyze ordered, multinomial responses in the dependent variable (Hoffman, 2004). The results of this regression are presented in Table 2.

Focusing on our primary independent variables, the dummy variables created for each of the five ethnic groups, the results show that the coefficients for the Dargin and Lak populations are significant at the 0.1 level. Generally, Dargins are not motivated to move; at the other end of the spectrum are the Laks, who are significantly more likely to strongly favor such migration if presented with the opportunity. The result substantiates the historical context; as noted above, a number of Laks were resettled during World War II, and their native villages were subsequently destroyed. The proximate location of Novolakskiy Rayon on the eastern border of Chechnya, the return of native Chechens to the area following the group’s rehabilitation, the failed attempts at the resettlement of Laks near Makhachkala and the marginal economic opportunities of their mountainous communities also serve to increase the migration propensity of this population.

Regarding our secondary socio-demographic variables, respondents who reported low levels of income are more likely to migrate than wealthier respondents. This result is in line with theories on the economic motivations for migration, which underscore the impact of low economic status in promoting the notion of migration. We further explore this connection between economic motivations and migration in the subsequent questions. We note that the urban variable is not significant (expecting it to be negative and significant): rural residents are not necessarily more likely to move than those who reside in cities. Some interesting results do however emerge from the model and in general, support the prior literature on migration and meet our theoretical expectations. For example, males are traditionally much

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Table 1. Likelihood of Moving (percent), by Nationality

<table>
<thead>
<tr>
<th>Response</th>
<th>Avar</th>
<th>Dargin</th>
<th>Kumyk</th>
<th>Lak</th>
<th>Lezghin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very likely to move</td>
<td>19.3</td>
<td>14.5</td>
<td>21.8</td>
<td>36.4</td>
<td>9.9</td>
</tr>
<tr>
<td>Likely to move</td>
<td>20.5</td>
<td>12.2</td>
<td>17.2</td>
<td>14.6</td>
<td>17.3</td>
</tr>
<tr>
<td>Not likely to move</td>
<td>26.1</td>
<td>36.6</td>
<td>24.1</td>
<td>23.6</td>
<td>37.0</td>
</tr>
<tr>
<td>Definitely not likely</td>
<td>32.4</td>
<td>32.8</td>
<td>32.2</td>
<td>25.5</td>
<td>30.9</td>
</tr>
</tbody>
</table>

*Responses to Question 1: If you had the opportunity to move to another rayon or community in the next two years, would you do so? Percentages do not total to 100 because “don’t know” responses have been dropped. Data from O’Loughlin et al. survey of the North Caucasus, December 2005.*
more likely to express intentions to migrate (Castles and Miller, 2003). Pensioners are unlikely to move, and our model supports this idea.

The Clarify procedure allows us to present these findings in terms of easily interpretable percentages, which are shown in Table 3. In regards to the significant ethnic variables, 73 percent (sum of “definitely not likely” and “not likely”) of Dargins would not move if presented with such an opportunity, compared to 63 percent for the rest of the sample. The percentage difference between those the low and high income categories is particularly striking; 46 percent of those who responded that they did not have enough money for food indicate that they would move, while only 28 percent of the highest income category responded that they would move.

Model 2: Modeling Motivations to Move

For those who indicated that they would be “very likely” or “likely” to move in the next two years if given the opportunity, we probed the reasons why they would consider migrating from their present home. Based on research into economic influences for internal migration and supported by the preceding analysis, we posited that economic motivations were the primary factor in influencing individual-level migration decisions. Therefore, we recoded the values for the identified question to focus on economic motivations and used logistic regression to model our binary variable (move for economic reasons = 1 or move for non-economic reasons/don’t know = 0). The results of this regression are first presented in Table 4.

None of our primary independent variables, created for the selected ethnic groups, are significant. There is no conclusive difference between these populations and other residents of Dagestan. Two notable patterns, however, stand out from this analysis. The first supports the connection between economic motivations and movement indicated in the literature

Table 2. Ordered Probit Estimates and Summary Statistics for Predictors of Responses

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>St. error</th>
<th>Z</th>
<th>P &gt; z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pensioner</td>
<td>-1.189</td>
<td>.156</td>
<td>-7.64</td>
<td>.000</td>
</tr>
<tr>
<td>Female</td>
<td>-0.292</td>
<td>0.091</td>
<td>-3.22</td>
<td>.001</td>
</tr>
<tr>
<td>Increasing income</td>
<td>-0.168</td>
<td>0.071</td>
<td>-2.33</td>
<td>.017</td>
</tr>
<tr>
<td>Dargin</td>
<td>-0.289</td>
<td>0.155</td>
<td>-1.86</td>
<td>.063</td>
</tr>
<tr>
<td>Lak</td>
<td>0.318</td>
<td>0.190</td>
<td>1.67</td>
<td>.095</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lezghin</td>
<td>-0.227</td>
<td>0.171</td>
<td>-1.33</td>
<td>.185</td>
</tr>
<tr>
<td>Avar</td>
<td>-0.122</td>
<td>0.145</td>
<td>-0.84</td>
<td>.400</td>
</tr>
<tr>
<td>Kumyk</td>
<td>-0.078</td>
<td>0.170</td>
<td>-0.46</td>
<td>.647</td>
</tr>
<tr>
<td>Education</td>
<td>-0.024</td>
<td>0.068</td>
<td>-0.35</td>
<td>.730</td>
</tr>
<tr>
<td>Urban</td>
<td>-0.016</td>
<td>0.095</td>
<td>-0.17</td>
<td>.865</td>
</tr>
</tbody>
</table>

-cut 1      | -1.43       | 0.275     |       |       |
-cut 2      | -0.546      | 0.272     |       |       |
-cut 3      | -0.020      | 0.272     |       |       |

aN = 604; pseudo R² = .053; log likelihood = -771.
review and substantiated in our first model. Those who self-reported that they did not have enough money for food were more likely to migrate, as indicated by the negative coefficient on the income variable. Importantly, the urban-rural variable is significant at the 0.1 level in this model. Urban respondents are less likely to move for economic reasons than their rural counterparts. This is an important finding; the prior literature and research on Dagestan shows that rural populations are poorer and have less opportunity for employment than their urban counterparts, and posited that rural migrants move for economic reasons. Our model

Table 3. Interpretation of Modeling Migration Intention, Using Clarify

<table>
<thead>
<tr>
<th></th>
<th>Definitely not likely to move</th>
<th>Not likely to move</th>
<th>Likely to move</th>
<th>Very likely to move</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>.316 (.019)</td>
<td>.339 (.020)</td>
<td>.167 (.016)</td>
<td>.178 (.016)</td>
</tr>
<tr>
<td>Pensioner</td>
<td>.707 (.048)</td>
<td>.214 (.030)</td>
<td>.052 (.013)</td>
<td>.027 (.009)</td>
</tr>
<tr>
<td>Non-pensioner</td>
<td>.262 (.019)</td>
<td>.333 (.020)</td>
<td>.183 (.017)</td>
<td>.222 (.018)</td>
</tr>
<tr>
<td>Male</td>
<td>.265 (.023)</td>
<td>.333 (.020)</td>
<td>.182 (.017)</td>
<td>.219 (.022)</td>
</tr>
<tr>
<td>Female</td>
<td>.367 (.025)</td>
<td>.337 (.020)</td>
<td>.151 (.016)</td>
<td>.144 (.017)</td>
</tr>
<tr>
<td>Income = 1 (low)</td>
<td>.219 (.043)</td>
<td>.318 (.024)</td>
<td>.193 (.020)</td>
<td>.270 (.047)</td>
</tr>
<tr>
<td>Income = 2</td>
<td>.269 (.027)</td>
<td>.334 (.021)</td>
<td>.181 (.018)</td>
<td>.216 (.025)</td>
</tr>
<tr>
<td>Income = 3</td>
<td>.327 (.020)</td>
<td>.339 (.020)</td>
<td>.164 (.015)</td>
<td>.170 (.016)</td>
</tr>
<tr>
<td>Income = 4 (high)</td>
<td>.390 (.038)</td>
<td>.334 (.021)</td>
<td>.144 (.017)</td>
<td>.132 (.023)</td>
</tr>
<tr>
<td>Dargin</td>
<td>.400 (.053)</td>
<td>.331 (.022)</td>
<td>.141 (.021)</td>
<td>.128 (.030)</td>
</tr>
<tr>
<td>Non-Dargin</td>
<td>.296 (.022)</td>
<td>.337 (.020)</td>
<td>.173 (.016)</td>
<td>.193 (.019)</td>
</tr>
<tr>
<td>Lak</td>
<td>.226 (.054)</td>
<td>.319 (.026)</td>
<td>.191 (.022)</td>
<td>.264 (.057)</td>
</tr>
<tr>
<td>Non-Lak</td>
<td>.327 (.020)</td>
<td>.339 (.020)</td>
<td>.164 (.015)</td>
<td>.170 (.016)</td>
</tr>
</tbody>
</table>

Table 4. Question 2: Why Would You Like to Move? Logistic Estimates and Summary Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>St. error</th>
<th>Z</th>
<th>P &gt; z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>–1.328</td>
<td>.359</td>
<td>–3.70</td>
<td>.000</td>
</tr>
<tr>
<td>Increasing income</td>
<td>–.838</td>
<td>.292</td>
<td>–2.87</td>
<td>.004</td>
</tr>
<tr>
<td>Urban</td>
<td>–.711</td>
<td>.368</td>
<td>1.93</td>
<td>.053</td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lezghin</td>
<td>–.870</td>
<td>.686</td>
<td>–1.27</td>
<td>.205</td>
</tr>
<tr>
<td>Dargin</td>
<td>.743</td>
<td>.738</td>
<td>1.01</td>
<td>.314</td>
</tr>
<tr>
<td>Kumykh</td>
<td>–.403</td>
<td>.626</td>
<td>–0.64</td>
<td>.520</td>
</tr>
<tr>
<td>Lak</td>
<td>.300</td>
<td>.691</td>
<td>–0.43</td>
<td>.664</td>
</tr>
<tr>
<td>Education</td>
<td>.110</td>
<td>.262</td>
<td>0.42</td>
<td>.674</td>
</tr>
<tr>
<td>Avar</td>
<td>–.160</td>
<td>.562</td>
<td>–0.28</td>
<td>.777</td>
</tr>
</tbody>
</table>
supports the conclusion that for rural Dagestan respondents, economic status (and the prospects for an improvement in income) plays a central role in migration decisions.

Again, the results of this regression are presented with the help of the Clarify procedure, in Table 5. The results from the regression model clearly stand out in this presentation. Those respondents who indicated that their income was not sufficient to purchase everyday needs were nearly 35 percentage points more likely that those with sufficient economic resources to move due to economic motivations. The second significant result is the difference between male and female respondents who are likely to move if presented with the opportunity. Males are more than 20 percent more likely to move for economic reasons compared to females, probably a reflection of social hierarchies in an Islamic society, but also matching well-established findings of migration research in many historical and geographical contexts. Rural respondents are 11.6 percent more likely than urban dwellers to move for economic reasons.

Modeling the Choice of a Migration Destination

Our third analysis focused on the preferences for a destination among likely migrants, as this question was only asked of those who responded “likely” or “very likely” to the first question (intention to migrate). Focused on regional migration patterns, we stratified the sample by destination preference, either within Dagestan (1) or outside Dagestan (0). As noted previously, 44 percent of respondents would choose to remain in Dagestan.

In the logit model, six predictors showed a significant relationship with the regional migration preference (Table 6). Among the five analyzed ethnic groups, four populations are significantly more likely to remain in Dagestan if they migrate. This result is expected; the Avars and Dargins are the two largest ethnic groups in the republic, and are primus inter pares in Dagestan’s ethnopolitical model. Given their group size and political power, it is not surprising that these groups would remain in the republic. The desire among Laks and Kumyks to remain in Dagestan potentially reflects the historical attachment of these groups to the republic and to their home territories. Much of the literature focusing on the Laks, for
example, discusses their resettlement from Novolakskiy Rayon. Our survey results reinforce
the idea that ethnic networks are important for such groups, with native ethnic groups choos-
ing to remain in Dagestan when they move. As migrants move to urban areas along the
Caspian coast, clan or kinship structures form a foundation on which to construct a new life.
In addition, the model indicates a strong regional preference among potential rural migrants
in the republic. These respondents were significantly more likely to remain in Dagestan if
they moved, as indicated by the negative coefficient on the urban variable. The expected
rural-to-urban model within Dagestan is supported by this result. Urban residents who are
more likely to be disassociated from ethnic support structures prefer to move out of
Dagestan. This could also be connected to economic opportunities; those individuals who
already live in urban areas in Dagestan may believe that more profitable economic opportu-
nities can only be found outside of the republic.

The baseline for our model, as shown in Table 7, indicates the general preference (58.4
percent) for migrating outside of Dagestan. Among the ethnic groups, the most interesting
results are those associated with the Avar and Dargin. These populations are, respectively, 60
and 41 percent more likely than the rest of the population to stay in the republic. Half of the
rural migrants would remain in Dagestan, while 70 percent of urban respondents would
migrate outside of the republic. This clear trend in urban-rural migration underscores prior
literature and findings on migration in the republic.

CONCLUSION

Patterns of resettlement and migration serve to reinforce and change place-based pro-
cesses. By examining migration, we can advance the interpretation of real and potential
forms of socio-economic, inter-nationality and political-religious interaction. As it has for
decades, contemporary migration in Dagestan still reflects a great deal of the top-down orga-
nization of the Soviet state, the impact of natural processes in a dynamic mountain environ-
ment, and the demographic trends present in the republic. This is reflected in out-migration
from rural locales to areas with increased economic opportunities, a pattern that coincides
with broader trends in the migration literature.
In the context of the traditional, finely contoured borders of Dagestan’s administrative units (the republic is composed of 41 administrative rayons\(^{20}\)), there is a tendency for not just economic, but also ethnic isolation in these units, particularly for those located in the mountains. Each rayon develops a set of interests associated with a particular ethnic identity, which is potentially troubling for political integration in the republic. The presence of strongly religious communities in isolated settings has been identified by journalists and academics (Shikhsaidov, 1999; Roshchin, 2004; Abdulagatov, 2006). On the other hand, in the plains and foothills, a large number of settlements are multiethnic.

The trend of migration from mountains to cities in the Caspian Sea plain is well established in Dagestan (Ibragimov and Matsuzato, 2005). Our statistical findings strongly support the idea that economic motivations play an important role in influencing such migration. Consistently, those respondents with low income levels are more likely to move if given the opportunity; these respondents indicated that such migration would be undertaken primarily for economic reasons. While we recognize the limitations of the sample, because our survey questions were posed in the conditional (“if you had the opportunity . . .”), we contend that this work serves to underline important migration practices in Dagestan.

Ethnic migration is currently leading to changes in the ethnic composition of the territories in the North Caucasus. We have identified three main trends: the active resettlement of migrants from the mountains to the plains; a steep decline in the number of Russians living in Dagestan; and an increasing level of ethnic diversity among the rayons of Dagestan and

\(^{20}\)In addition to these rayons, there are 10 cities/urban zones depicted in Figures 1 and 2.

<table>
<thead>
<tr>
<th></th>
<th>Migration within Dagestan</th>
<th>Migration outside Dagestan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>.416 (.040)</td>
<td>.584 (.040)</td>
</tr>
<tr>
<td>Avar</td>
<td>.825 (.064)</td>
<td>.175 (.064)</td>
</tr>
<tr>
<td>Non-Avar</td>
<td>.226 (.054)</td>
<td>.774 (.054)</td>
</tr>
<tr>
<td>Kumyk</td>
<td>.777 (.101)</td>
<td>.223 (.101)</td>
</tr>
<tr>
<td>Non-Kumyk</td>
<td>.344 (.050)</td>
<td>.656 (.050)</td>
</tr>
<tr>
<td>Lak</td>
<td>.789 (.102)</td>
<td>.211 (.102)</td>
</tr>
<tr>
<td>Non-Lak</td>
<td>.355 (.048)</td>
<td>.645 (.048)</td>
</tr>
<tr>
<td>Urban</td>
<td>.302 (.055)</td>
<td>.698 (.055)</td>
</tr>
<tr>
<td>Rural</td>
<td>.502 (.051)</td>
<td>.498 (.051)</td>
</tr>
<tr>
<td>Dargin</td>
<td>.759 (.103)</td>
<td>.241 (.103)</td>
</tr>
<tr>
<td>Non-Dargin</td>
<td>.347 (.051)</td>
<td>.653 (.051)</td>
</tr>
<tr>
<td>Male</td>
<td>.352 (.050)</td>
<td>.648 (.500)</td>
</tr>
<tr>
<td>Female</td>
<td>.497 (.058)</td>
<td>.503 (.058)</td>
</tr>
</tbody>
</table>
neighboring republics/oblasts of the North Caucasus, due to an influx of migrants from other territories in the region. Often overlooked by political commentators, these trends support interethnic mixing, particularly in the cities of Dagestan, possibly adding to the political stability of the republic.

REFERENCES


Aliyev, Sharafudin, Ekonomicheskaya i sotsial'nya geografiya Dagestana (The Economic and Social Geography of Dagestan). Mahachkala, Russia: Daguchedgiz, 2005.


Anuchin, Dmitrii, Ochet ot poyezdki v Dagestan letom 1882 (An Account of a Trip to Dagestan, Summer 1882). St. Petersburg, Russia: Russian Geographical Society, 1884.


Dirr, Adolf, Ocherki po etnografii Dagestana (Sketches on the Ethnography of Dagestan). Tbilisi, Georgia: Caucasus Branch, Russian Geographical Society, 1903.


Gammer, Moshe, “Walking the Tightrope Between Nationalism(s) and Islam(s): The Case of Dagestan.” Central Asian Survey, 21, 2:133–142, 2002.


