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AFGHANISTAN PROJECT PLANNING:

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I. BACKGROUND

The purpose of this report is two-fold. First, it is an extraction of readily available data, from U.S. sources, which are descriptive of Mohammad Agha Woleswali (district) of Logar Province, Afghanistan in support of an AID-Government of Afghanistan joint rural development project to be sited in the district. Second, and more broadly, using Mohammad Agha as an example, it is an investigation of currently available computerized data based upon the Afghan Demographic Studies (ADS) project. Field work on the ADS project was carried out between 1971 and 1975. The final editing of tapes and production of specialized reports was completed in 1976. The general and specific ADS sources consulted are listed at the conclusion of this report. The work order provided for three days of effort, most of which was spent in extracting the computerized data. The degree of written information which can be presented in this report is thus circumscribed by the time constraint. The author welcomes discussion of any specific points which have been raised but which could not be treated in detail.

II. DESCRIPTIVE DATA AND MAPS

A. General Description

For sampling and estimating purposes, the ADS project placed Mohammad Agha Woleswali in rural stratum No. 1 "Kabul-Logar Valley." These rural strata are designed to be groups of Minor Civil Divisions or Districts, exclusive of urban centers, which are relatively homogeneous in terms of rural population characteristics, density, settlement type, and agriculture. (Source 6). The Kabul-Logar Valley is characterized as densely settled and well irrigated, capable of producing three crops in two years in favored areas. There exists the typical agricultural system combining dry farming and grazing to supplement traditional irrigation. There are small desert zones, and largely barren hills flanking the cultivated areas. The surface water supply is generally good and the district is favorably regarded as one of the most fertile and agriculturally rich areas in the country. The valley is part of the Kabul food shed, providing vegetables, fruit, tree crop and meat products in addition to Afghanistan's staple, wheat.

Ethno-linguistically, the district is part of a shatter zone of mixed Pakhtu-speaking Ghilzai and Dari speaking Tadjik. Much of the male population at least, is bi-lingual. In terms of mixing, there are cases where one village is predominantly one group and the neighboring village belongs to the second group, cases where there is residential segregation within a village and further cases of residential intermingling among the dwelling units and intermarriage among families. It should be noted that the ADS survey at the request of the Afghan Government, did not deal with ethno-linguistic questions. Thus, the above material is intended to be purely descriptive and subject to more detailed observations.

As the northernmost district in Logar Province, Mohammad Agha is within the commuting shed of Kabul. A paved road passing from Kabul through the Logar Valley into Paktia Province bisects Mohammad Agha Woleswali and improves both the commuting and agricultural marketing attractiveness of the district. An international airport is tentatively scheduled for construction in the vicinity. To the degree that Mohammad Agha is influenced by its proximity and accessibility to Kabul and by the relatively large amount of well-watered land, it cannot be considered representative of the total rural zone of Afghanistan. Nonetheless, too much should not be made of this point since neither Mohammad Agha Woleswali nor any settlement in Logar Province contains an urban center and the employment structure of most villages is geared to agricultural production for domestic consumption and the Kabul market.

The principal published sources^{1/} provide relatively little description of the area but agree in describing its relative fertility. Several sources note that the Logar Valley was the scene of early rural development efforts by AID's predecessor agency and its Afghan counterpart. The area is no stranger to integrated rural development projects under various names.

(The) Local Development Department has been working in Logar for 11 years on such projects and introducing improved methods of ploughing, controlling pests and disease, and distributing chemical fertilizer...(and)...has set up schools and health facilities. (Source 1)

^{1/}The Human Relations Area Files, left with the ADS Project Library in the Central Statistics Office, can also be consulted for further descriptive material.

A rough estimate of the rural population is 69,789. The figure is derived in a manner consistent with the methods utilized in deriving the ADS estimate for the entire rural zone population. The 70,000 estimate for Mohammad Agha is in need of refinement and should be regarded as a tentative planning figure only. (Source 7).

Based upon the district boundaries derived for all districts by the ADS project (Sources 6 and 13) the area is estimated as 1,017 square kilometers, which provides an overall population density of 69 people per square kilometer with considerable local variability around that figure. This value places Mohammad Agha in the first density quintile with a rank of 275 among the 319 rural zone Minor Civil Divisions.^{2/}

The ADS nomadic survey tentatively grouped Mohammad Agha in a median density category for non-settled population. One of the findings of the nomadic survey was that the Logar Valley has one of the highest seasonal concentrations of nomadic population in the country. This is partly due to the transitory population moving from Pakistan or Paktia into the rest of the country. But, it is also an area of summer tent concentrations related primarily to trading opportunities, seasonal agricultural employment opportunities, and ethnic linkages to the settled population.

B. Map Material and Gazetteer

First as a necessary input to sampling and estimating the settled population of Afghanistan and secondly as a by-product of those efforts, the Afghan Demographic Studies (ADS) project developed a number of materials covering Mohammad Agha district and all other districts in Afghanistan regardless of whether or not they were surveyed. Once the rural strata had been defined, certain districts were picked from each of the strata, villages were picked from the district, and households were selected from the villages in a multi-stage sampling and estimating operation involving sketch mapping, air photos and photo structure counts,

^{2/} At the time of the ADS survey, there were 325 Minor Civil Divisions of which six were totally urban. Urban population was subtracted before making the density calculations.

household prelisting, village descriptions, and other materials.^{3/}

The best maps available to the public are the ACIC (Aeronautical Chart and Information Service) series of Operational Navigation Charts at a scale of 1:1,000,000. These include topography, altitude tinting and hydrology. The toponomy on these maps is not particularly good and, except for some copies modified by ADS, they do not include the province or Minor Civil Division boundaries.^{4/}

The provisional Gazetteer of Afghanistan was also developed by ADS and the relevant materials covering Mohammad Agha Woleswali are incorporated as exhibits in this report. The Gazetteer and outline map are publicly available in the U.S. and Afghanistan, but in very limited quantities. The first map (Exhibit A) is derived from the 1:1,000,000 Minor Civil Division outline map. The second map (Exhibit B) enlarges the scale to 1:250,000, and superimposes the Mohammad Agha boundary on a topographic base map of the scale of 1:250,000. These larger scale maps are not generally available in the U.S. They are developed from a joint AID-Government of Afghanistan mapping project carried out in 1968. The maps were printed by the Afghan Cartographic Institute (ACI) at scales of 1:50,000 and 1:100,000 as well as the 1:250,000 scale shown here. A summary 1:500,000 series is under production in Afghanistan. The ADS project utilized these maps and various lists of villages with associated size measures in its survey activities. One set of 1:250,000 series was procured by the AID mission for "Operation Help" in 1972. The Afghan Cartographic Institute, in general, is reluctant to release any of these maps for approved development projects although, in addition to ADS, several AID, World Bank and United Nations projects have succeeded in receiving permission to utilize some of the maps.

^{3/} See Sources 6 and 9 as well as the ADS Demographic Research Report series and extensive project archives held at the Central Statistics Office, Kabul, filed by village and district.

^{4/} These boundaries were developed by the ADS project on maps at various scales including a 1:1,000,000 scale Minor Civil Division outline map. This is currently being incorporated in the University of Nebraska's Center for Afghanistan Studies Atlas of Afghanistan project.

The overall population distribution within Mohammad Agha District is revealed on the second map (Exhibit B) along with the principal settlements. A certain amount of detail is lost in the black and white rendering of the colored original and in passing from 1:100,000 to 1:250,000 scale. The greatest quantity of irrigated land and, with it, the largest number of villages and highest population density is located along the paved Kabul-Gardez Highway. Scattered pockets of cultivation away from the highway as well as dry farming, seasonal grazing and desert (dašt) can also be seen on the map. The pages following include a summary and list of villages for Mohammad Agha District (Exhibit C) drawn from the Gazetteer (Source 13). Most items are self explanatory, but teams attempting to utilize the Gazetteer material would be well advised to read the Introduction in Volume I. This is particularly true with regard to the interpretation of the Ministry of Agriculture and Irrigation (MAI) and Administrators (WOL) estimates of population. The latter is based on the number of work permits (tazkira) issued to eligible males. This number bears differing relationships to the estimated population from village to village. An additional problem is that the exact areal extent of each village can only be determined on the site. The 20,359 figure is the number of Tazkira's issued between 1954 and 1973. These are accumulated in three books known as the "Asle Asas" (AA), Qalamandaz (KA) and Nawtawaludat (NT). The initial Asle Asas registration generally picked up more of the eligible population than the latter books and thus was utilized in the ADS sample expansion factors. The Gazetteer figures refer to all three books while the associated size measure in Volume 2 of the SUNY reports (Source 9) is based on the Asle Asas figure only.

Four of the five ADS sample villages: Mohammad Agha; Ab Paran; Kutub Khel; and Zargun Shar are located and underlined on the map (Exhibit B). The fifth and smallest sample village, Qalae Taj Khan was removed in the compilation process in passing from the 1:100,000 to 1:250,000 scale map. As noted previously, the exact areal delimitation of each rural district (Quarya or village) and its relation to the Tazkira registration system must be worked out on site. This was done by ADS only for its sample villages with the aid air photos, maps, and ground teams. The Gazetteer represents

a great deal of organizational work with place names of villages and sub-villages for all districts in the country. Again, the Introduction to Volume 1 of the Gazetteer (Source 13) must be read for fuller understanding.

III. AFGHAN DEMOGRAPHIC STUDIES REPORTS AND DATA TAPES

The published results, as opposed to the methodology, of the ADS survey are contained in Volume I and the supporting tables in Volume III of the SUNY reports (Sources 8 and 10).^{5/}

At a later stage of the project, Pinkerton Computer Consultants were retained for detailed tape editing and the provision of a data tape compatible with the IBM machine in Kabul and for the production of detailed reports on a province basis.

Estimates of the size of total population for rural villages and rural strata were developed in Kabul and at Johns Hopkins University (Source 9). Certain of this size estimating material is available on village summary tapes prepared by Pinkerton. Estimates of demographic parameters, as opposed to population size, based on the ADS Household Interview Schedule (HHIS) have been developed by SUNY (Sources 8 and 10) for the entire rural zone and subsequently by Pinkerton (Sources 11 and 12) on a province basis. They are not available on a stratum or Minor Civil Division summary basis for a number of reasons.

The tapes developed by Pinkerton consist of six files. The first three of these are developed on a basis of one computer record per HHIS. These include:

1. The SUNY Data Base which was utilized to develop the second file.
2. The New Format Master. This includes materials from the Pregnancy History Interview Schedule (PHIS) which

^{5/} Volume II contains the methodology and Volume IV contains two essays on indigenous fertility measures.

introduced difficult matching problems in the computer operations. It excludes the employment/occupation data.

3. The Employment Master. It includes the employment data and excludes the PHIS and related family planning KAP data.
4. The Village Summary File takes a number of individual HHIS variables and aggregates them at the rural village level. But, variables related to employment and occupation or material on the Pregnancy History Interview Schedule (PHIS) including family planning (KAP) did not make the passage from the individual records to this village summary file for a number of reasons. The village summary file is the most useful of the six files developed by Pinkerton for the purposes of this report.
5. The All-Country Summary File aggregates the Village Summary File into the entire Rural Zone and includes similar aggregated data for Major Urban Centers (Kabul, Kandahar, Herat, Mazar-i-Sharif, Kunduz) and the remaining Minor Urban Centers.
6. The Employment Reports File again contains one record for every individual and summarizes the employment information. It does not provide a village summary level of aggregation for this information.

It should be noted that Pinkerton faced a difficult job in editing the entire data base and producing the required summary reports. The problems have been detailed in a separate Pinkerton report. They include principally internal consistency checks and matching problems between Household Interview Schedule data and Pregnancy History Interview Schedule data and other problems engendered by the large number of items on the questionnaire and the variable number of people represented on a single HHIS. Pinkerton solved these problems, generated the required reports, and passed the reports and data tapes on to the mission in Kabul. A set of the various files remains with the Data Management Office of AID-Washington. Complete understanding and utilization of these materials requires the integration of three elements:

1. The detailed material provided in a Pinkerton report entitled "The Afghan Demographic Survey Data Bases and Programs."
2. The Code Book developed by ADS-Kabul and slightly modified by SUNY for production of Sources 8 and 10. This Code Book is not generally available, but is required for an understanding of the material listed in Item 1 above.
3. Job control procedures which at this point, are best understood by Pinkerton personnel who worked on the editing job.

Manipulation and summary of individual HHIS and PHIS (including Family Planning KAP) is a large data processing job beyond the scope of this three-day work order. The data is there, as prepared by the Pinkerton Consultants for the reports required by their contract. The data could be extracted and summarized for other project planning purposes. Effective further use of the data requires a reduction in variables to keep the file manageable, production of a complete code book, and technical job control specifications if the data is to be readily accessed by AID personnel.

This report confines itself to the material available in the Village Summary File for each of the five villages in Mohammad Agha district. Identification and estimating data for Mohammad Agha is presented as Exhibit D with explanatory notes.

Interpretation of the remaining Village Summary data is presented in Exhibit E and the accompanying notes. It should be emphasized that these items represent tallies off the Household Interview Schedules (HHIS) only. They have not been expanded to the entire village level. Technically, village estimates can be made by multiplying the tally count by a factor of the village estimated population (Exhibit D, Item Q) divided by the number of individuals covered by the interview schedule (Item L). Such estimates are very crude and depend not only upon the accuracy of the village population estimate but the representativeness of the sample drawn within the village and the lack of any particular non-sampling error on the related Household Interview Schedules, which generally number about 30 per village.

IV. SUGGESTIONS TO IMPROVE UTILIZATION OF ADS DATA

Attempts to generate parameter estimates at too small a level of aggregation, such as the village, generate problems of sampling fluctuation and may also magnify the non-sampling errors in individual villages. At the moment, a better approach is to apply Rural Zone (or Major and Minor Urban Zone) parameter estimates to the individual city or Minor Civil Division or village to generate expected occurrences (Births, Deaths, School Enrollment, etc.). Retention of the major key sequence utilized in the Pinkerton reports with the capability of summing individual villages or wards to larger aggregates would provide a ready means of testing estimated occurrences for smaller aggregations against the rural and urban zone estimates.

With regard to the existing data tapes and their documentation, we suggest the following based on the experience gained in this report and in working with the existing files.^{6/} We recommend a thoughtful and careful consideration by AID of which variables would be most useful for future planning purposes. Individual data, including employment, occupation and Family Planning KAP, could be summarized on a rural village and urban nahya (ward) basis. This level of aggregation would retain the basic data structure and elements of the existing village summary file. It would allow the smaller building blocks (rural villages and urban nyahs) to be combined in any particular desired way through simple summation. This recommended village summary would include unexpanded tallies for each area. It is important that these be unexpanded since the Pinkerton and SUNY analyses have indicated evidences of certain undercounts on some of the variables. Thus, these counts would serve as descriptive measures for the survey households only and would not be used for further expansion or parameter estimation until or unless further corroboration of the expansion factors is undertaken.^{7/}

Implementation of this suggestion would produce the village summary tape

^{6/} See Page 7 above.

^{7/} See Sources 7 and 9 for a discussion of these expansion factors and means by which reported village total population, or characteristics of that population such as total deaths, are expanded upward to yield stratum estimates of total population or total deaths.

by manipulation of the desired variables from the New Format Master or the Employment Master files. Any further work should also specify that a unified code book including the relevant portions of the Pinkerton and SUNY code books be produced, and that the summary tape be accompanied by job control descriptions and procedures such that further inquiry could be made directly by the AID Data Management Office, or hopefully by the Afghan Computer if technical limitations could be met. Realistically, such a procedure would require initial input from Pinkerton, AID's Data Management Office, and advisory consultation from the Population or Technical Assistance Offices of AID (including Mission input) as to which variables are desired. Detailed specification should be through a small working group. As it now stands, the ability to integrate two code books with control requirements is limited to a very few people not directly associated with AID's Population, Technical Assistance, and Data Management personnel. It may be difficult for AID-Washington to accept further work on the ADS data. Nonetheless, it is our best judgment that this small final effort is needed to put the data in fully useable form for baseline studies and project planning.

Finally it should be noted that population size estimates, while available for individual cities^{7/} are presently only available for the total rural zone containing 85% of the estimated sedentary population. It is possible to apply the estimating methods for the rural zone to smaller aggregations such as rural zone strata and Minor Civil Divisions. Such an extension should be made with extreme care as the sampling and estimating operations were not designed to develop estimates at a fine scale. Nonetheless, it is felt that production of these administrative estimates for the rural zone would provide useful planning approximations for the mission and the Afghan Government. A number of projects such as textbook and fertilizer distribution, inoculations, and other medical, family planning, and rural development efforts are dependent to a considerable degree on the

^{7/} Urban zone estimates were made directly on the basis of structure counts on air photos and hence could be produced on an individual city basis. Rural zone estimates depended upon the calibration of estimating models extending the relationship between population in sampled villages and the number of work permits issued to non-sampled villages (Sources 7 and 9).

underlying spatial distribution of the rural zone population. These estimates and resulting population density and distribution maps are the subject of an additional proposal and it should be noted here that they are independent of any further work on the survey data tapes used for demographic parameter estimates.

EXHIBIT A

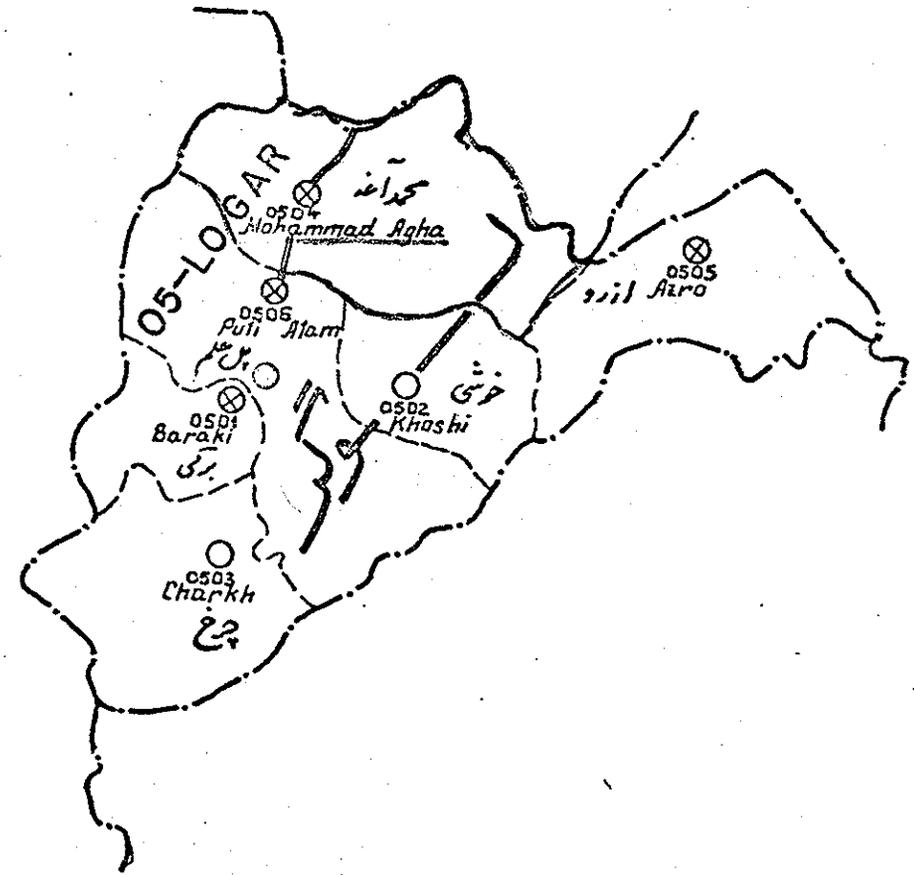
Boundary Sketch Map (1:1,000,000) of Logar
Province and Mohammad Agha Woleswali

ADMINISTRATIVE BOUNDARY MAP
OF LOGAR PROVINCE (05)
LEGEND

نقشه تقسیمات حدود اداری ولایت لوگر (د)

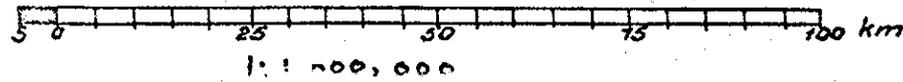
- Province Boundary ————
- Woleswati Ataqadari Boundary ————
- Province Center ⊙
- Woleswati Center ⊗
- Ataqadari Center ○

- اشارات مخصوصه :
- حدود ولایت
 - حدود ولسوالی و علاقہ اداری
 - مرکز ولایت
 - مرکز ولسوالی
 - مرکز علاقہ اداری



68°
+ 34°

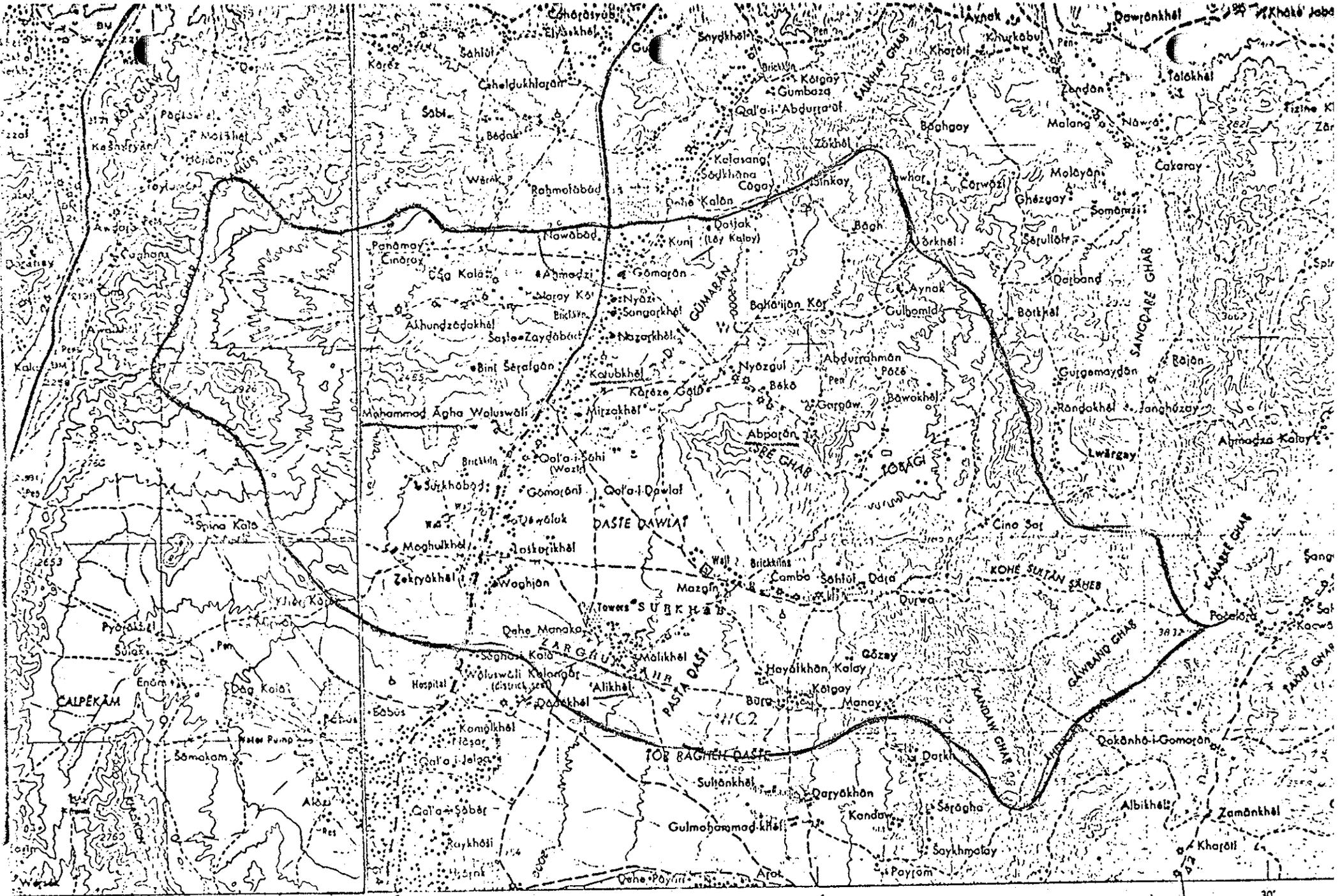
70°
+ 34°



تعمیر : پرویزہ سروی دیپو لگرافی

EXHIBIT B

Topographic Map (1:250,000) of
Mohammad Agha Woleswali

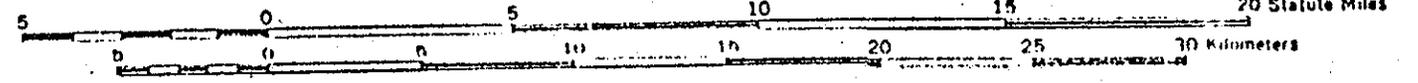


19 69°00' 33°00' 15 13 1 30'

69°00' 33°00' 15 13 1 30'

Scale 1:250,000

BEST AVAILABLE COPY



15

EXHIBIT C

Summary Page and Village List for Mohammad

Agha Woleswali as shown in the

Provisional Gazetteer (Source 13)

● = Located on attached 1:250,000 scale map.

ولسوالی - علاقہ داری محمد افسہ
Woluswall-Alaqadari Mohammad Agha

نمبر مسلسل Serial No.	اسم قریہ Village Name	نفس Population		سمت وقوع قریہ از مرکز ولسوالی Dir. from Wol. Cent.	نمبر نقشہ Map No.	ملاحظات Remarks ADS sample villages
		معلومات وزارت زراعت و آبپاشی MAI	معلومات وزارت داخلہ Wol.			
1 ●	Qarya-i-Gomran قریہ گمران	1200	2971	NE	510 E	✓
	1. Qala-i-Anwar-i-Gomran قلعہ انور گمران	-	*	-	-	
●	2. Neyazi Gomran نیازی گمران	-	*	-	-	
	3. Dawran Khail-i-Gomran دوران خیل گمران	-	*	-	-	
	4. Ghundi Gomran غندی گمران	-	*	-	-	
	5. Shir Afghan-i-Gomran شیرافگان گمران	-	*	-	-	
	6. Mirgai Khail-i-Gomran میرگی خیل گمران	-	*	-	-	
	7. Nazar Khail-i-Gomran نظر خیل گمران	-	*	-	-	
	8. Hossain Khail-i-Gomran حسین خیل گمران	-	*	-	-	
	9. Ghulam Haider Khan-i-Gomran غلام حیدر خان گمران	-	*	-	-	
	10. Qala-i-Khanjan-i-Gomran قلعہ خانجان گمران	320	*	N	-	
	11. Qarya-i-Shairaza-i-Gomran قریہ شیرازہ گمران	-	*	-	-	
	12. Kandwala-i-Gomran کندوالہ گمران	-	*	-	-	
	13. Qarya-i-Kabkh-i-Gomran قریہ کبکھ گمران	-	*	-	-	
	14. Kamal Khail-i-Gomran کمال خیل گمران	-	*	-	-	
●	15. Nazar Khail نظر خیل	160	*	NE	510 E	✓

ولسوالی - علاقہ داری محمد آغہ
Woluswali-Alaquadari Mohammad Agha

نمبر سلسل Serial No.	اسم قریہ Village Name	نفس Population		سمت وقوع قریہ از مرکز ولسوالی Dir. from Wol. Cent.	نمبر نقشہ Map No.	ملاحظات Remarks	
		معلومات وزارت داخلہ MAI	معلومات وزارت زراعت و آبپاری Wol.				
		معلومات وزارت زراعت و آبپاری MAI	معلومات وزارت داخلہ Wol.				
2	Qarya-i-Deh Nau Bagh-i-Sultan	قریہ، دہ نو باغ سلطان	1500	2448	S	-	
	1. Deh Nau	دہ نو	*	*	-	-	
	2. Bagh-i-Sultan	باغ سلطان	*	*	-	-	
	3. Qarya-i-Deh Nau	قریہ، دہ نو	*	*	-	-	
3	Dewalak	دیوالک	1000	93	S	510 E	
	1. Shakarti Khail	شکرتی خیل	700	*	-	-	
4	Surkh Abad	سرخ آباد	180	360	S	510 E	
	1. Qala-i-Shaikhak	قلعہ شیخک	600	*	-	510 E	
	2. Wazirestan	وزیرستان	-	*	-	-	
	3. Qawmi-i-Hazarah	قوم هزارہ	-	*	-	-	
	4. Hazarah	ہزارہ	-	*	-	-	
	5. Shadi Khan	شادی خان	-	*	-	-	
5	Weghjan	وغجان	1000	133	SW	510 E	
6	Zarghoon Shahr-i-Ali Khail (Zarghoon Shahr)	زرغون شہر علی خیل (زرغون شہر)	4300	1948	S	510 E	25
	1. Qala-i-Dalil	قلعہ دلیل	150	*	-	-	
	2. Qala-i-Shahi	قلعہ شاہی	170	*	-	510 E	
	3. Qala-i-Dawlat	قلعہ دولت	180	*	-	510 E	
7	Mohammad Agha	محمد آغہ	2300	806	SE	510 E	21
8	Mirza Khail (Mirza Khail-i-Qala-i-Nazar)	میرزا خیل میرزا خیل قلعہ ناظر	200	249	E	510 E	

ولسوالی - علاقہ داری محمد آغہ
Woluswalli-Alaquadari Mohammad Agha

نمبر سلسل Serial No.	اسم قریہ Village Name	نفس Population		سمت وقوع قریہ از مرکز ولسوالی Dir. from Wol. Cent.	نمبر نقشہ Map No.	ملاحظات Remarks
		معلومات وزارت زراعت و آبپاشی MAI	معلومات وزارت داخلہ Wol.			
95	Kutub Khail (Koti Khail) کتبخیل (کوتی خیل)	1500	4809	E	510 E	24
	1. Qala-i-Jarnail قلعہ جرنیل	15	*	E	-	
	2. Qandahari Kutub Khail قندھاری ما کتبخیل	120	*	-	-	
	3. Khwaja Dakhail-i- Kutub Khail خواجہ دا کتبخیل	-	*	W	-	
	4. Gotagi-i-Kutub Khail گوتگی کتب خیل	70	*	E	510 F	
	5. Guli Khail-i- Kutub Khail گلی خیل کتب خیل	-	*	-	-	
	6. Khadokhail-i- Kutub Khail خدو خیل کتب خیل	-	*	-	-	
	7. Keshni Kutub Khail (Keshem) کشنی کتبخیل (کشم)	25	*	W	-	
	8. Shaghassi Kutub Khail شاطسی کتب خیل	-	*	-	-	
	9. Ghazni Khail-i- Kutub Khail غزنی خیل کتبخیل	-	*	-	-	
	10. Qala-i-Wazir Salam Khail قلعہ وزیر سلام خیل	100	*	W	510 E	
10	Seyah Koh-i- Moghul Khail سیاہ کوہ مغل خیل	30	1200	SW	-	
	1. Moghul Khail مغل خیل	900	*	SW	510 E	
11	Shekar Qala شکار قلعہ	50	57	SW	510 E	
12	Zaid Abad زید آباد	400	595	N	-	
13	Dashtak دشتک	400	360	NE	510 E	
14	Qarya-i-Ainak قریہ اینک	300	196	NE	510 E	

ولسوالی - علاقہ داری محمد آغا
Woluswali-Alaqadari Mohammad Agha

تیسری سلسل Serial No.	اسم قریہ Village Name	تفوس Population		سمت وقوع قریہ از مرکز ولسوالی Dir. from Wol. Cent.	نمبر نقشہ Map No.	ملاحظات Remarks	
		معلومات وزارت زراعت و آبپاشی	معلومات وزارت داخلہ				
		MAI	Wol.				
15	Abparan	ابہران	350	186	E	510 E	23
16	Ahmadzai	احمد زائی	400	297	NE	510 E	
	1.Sayed Mir-i- Qala-i-Ahmadzai	سید میر قلعہ احمد زائی	-	*	-	-	
17	Sangar Khail Geran (Sangar Khail)	سنگر خیل گران (سنگر خیل)	70	88	N	510 F	
18	Taj Khan	تاج خان	140	72	E	510 E	22
19	Bahadur Khail	بہادر خیل	50	41	S	510 E	
20	Safaidd Sang	سفید سنگ	100	1263	E	510 E	
21	AbBazak	اب بازک	600	-	E	510 E	
	1.Tari Goot	تری گوت	-	*	-	-	
	2.Seyah Bini	سیاہ بینی	-	*	-	-	
	3.Qala-i-Nazer	قلعہ ناظر	-	*	-	-	
22	Qarya-i-Qoli	قریہ قولی	-	160	-	-	
	1.Langar-i-Qoli	لانگر قولی	-	*	E	510 E	
	2.Ghal Dara-i- Qoli	غل درہ قولی	50	*	E	510 E	
	3.Karaiz-i-Qoli	کاریز قولی	120	*	E	-	
23	Surkh Ab	سرخ اب	1400	1780	E	510 E	
	1.Dara-i-Surkh Ab	درہ سرخ اب	-	*	-	-	
	2.Qala-i-Kohna-i- Surkh Ab	قلعہ کهنہ سرخ	-	*	-	-	
24	Rahem Abad	رحیم آباد	*	148	E	-	
25	Qanat-i-Malik	قنات ملک	-	27	S	-	

ولسوالی - علاقه داری محمد اغه
Woluswall-Alaqaadari Mohammad Agha

نمبر سلسل Serial No.	اسم قریه Village Name	نوس Population *		سمت وقوع قریه از مرکز ولسوالی Dir. from Wol. Cent.	نمبر نقشه Map No.	ملاحظات Remarks
		معلومات وزارت زراعت و آبیاری MAI	معلومات وزارت داخله Wol.			
26	Sher Afghan شیر افغان	-	72	-	-	
• 27	Bini Shir Afghan بینی شیر افغان	-	*	E	-	

EXHIBIT D

Identification and Estimating Data for
Five ADS Sample Villages in
Mohammad Agha District

IDENTIFICATION AND ESTIMATING DATA FOR FIVE ADS
SAMPLE VILLAGES IN MOHAMMAD AGHA DISTRICT

Major Key							Name	Size and Parameter Estimating Data								
A	B	C	D	E	F	(G)	H	I	J	K	L	M	N	O	(P)	(Q)
1	01	05	04	2	1	00	MOHD AGHA	712	2	13.25	232	259	2	30	7.73	2003
1	01	05	04	2	2	00	QL TAJKAN	56	1	54.01	275	31	2	28	9.82	304
1	01	05	04	2	3	00	AB PARAN	237	1	54.01	231	79	2	36	6.42	507
1	01	05	04	2	4	00	KATUK KHEL	1558	2	13.25	290	343	2	33	8.79	3014
1	01	05	04	2	5	00	ZARGUN SHER	1172	2	13.25	266	315	2	36	7.39	2328

Notes for Exhibit D

Major Key

- Item A SUPER STRATUM This is one of the six major rural population regions. Mohammad Agha Woleswali is in Region 1, The Eastern Lowlands.
- Item B RURAL POPULATION STRATUM This is a smaller subdivision of the super stratum consisting of groups of districts. The stratum for Mohammad Agha Woleswali is 01, The Kabul Logar Valley. (See Source 6)
- Item C PROVINCE Logar Province is coded 05.
- Item D WOLESWALI This is Minor Civil Division 04 within Logar Province, namely Mohammad Agha District.

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Notes for Exhibit D (Continued)

Major Key

- Item E STRATUM TYPE Described by Pinkerton as the STRATUM TYPE, is a rural zone indicator. It is 2 for all villages in the rural zone and 1 for urban centers.
- Item F TOWN TYPE Described by Pinkerton as the TOWN TYPE, this identification number is keyed to maps, air photos, code books and interview schedules for those villages within each Woleswali which were initially selected for air photography and sketch mapping. In the case of Mohammad Agha District, five villages were surveyed.
- Item (G) NYAH NYAH has been coded 00 for the five rural villages but refers to wards in the urban zone.
- Item H NAME This is an alphabetic field providing the NAME of each village. These names have passed through numerous renditions of spelling in the data processing operation from Kabul to Buffalo to Washington and frequently do not correspond in spelling exactly with the names in the Gazetteer (See Source 13 for problems of Afghan name transliteration).
- Item I SIZE MEASURE The SIZE MEASURE in the case of all five villages refers to the number of male work permits or "Tazkiras" originally issued as recorded in the "Asle Asas" registration book and correspond to the ADS site investigation of village boundaries. This differs from the item shown in the "WOL" column of the Gazetteer since the latter source includes later registrants and may not refer to the same area on the ground as the ADS figures (See Source 13).
- Item J SIZE MEASURE
TYPE The SIZE MEASURE TYPE refers to the division of villages by Johns Hopkins into two size sub-stratums, those below and above 250 Asle Asas Tazkiras. An additional size sub-stratum, 3, referred to air photo counts in areas where Tazkiras were not issued and type 4, which designates villages excluded from the estimating process.

Notes for Exhibit D (Continued)

Major Key

- Item K SUB-STRATUM
EXPANDER The SUB-STRATUM EXPANDER is the multiplier by which survey items are expanded to reach a sub-stratum estimate. This may include total population or characteristics of that population such as births, deaths, school enrollments, etc. (For a more complete description, see Sources 7 and 9). This item is crucial to all size and parameter estimates. It has been included for each of the sample villages which were retained by Johns Hopkins for estimating purposes. Additional multipliers were developed by Pinkerton in the course of their analysis. (See Source 7). But these are generally of lesser utility and have not been retained in the village summary file.
- Item L INDIVIDUAL RECORDS INDIVIDUAL RECORDS is the total number of people covered by useable Household Interview Schedules (HHIS) in that village.
- Item M NUMBER OF
HOUSEHOLDS The estimated total NUMBER OF HOUSEHOLDS in the village derived from airphotos, prelisting and other measures developed at the site and in Kabul. (See Sources 7 and 9).
- Item N WAVE The WAVE number is a sub-sample of the total rural zone. Wave 2 was interviewed in 1972 along with the major cities excluding Kabul. The 3 remaining waves of the rural zone plus Kabul and minor cities were interviewed in 1973 with the nomadic survey being conducted in 1974.
- Item O HOUSEHOLDS
COMPLETED HOUSEHOLDS COMPLETED is the number of useable Household Interview Schedules (HHIS) included in the Pinkerton data.
- Item (P) AVERAGE HOUSE-
HOLD SIZE The AVERAGE HOUSEHOLD SIZE or the result of dividing Item L by Item O.
- Item (Q) The estimated population of the entire village resulting from the multiplication of Item (P) by Item M. The last two items are not included on the Village Summary File.

EXHIBIT E

Contents of Village Summary File Data for
Each of Five ADS Sample Villages in
Mohammad Agha District

Notes for Exhibit E

Exhibit E, with minor deletions covering single year age breakdowns, represents the contents of the Village Summary File (Tape 001517, File ID A 250.V SUMMARY, Record Size 6500, Block Size 13000) held by the AID Data Management Office. The assistance of John Marshall (AID) and Richard Schulz (Pinkerton Computer Consultants, Inc.) is gratefully acknowledged. Creation of the file was the prime responsibility of Dr. Dennis Clague (Pinkerton) who was on leave at the time this report was prepared.

Items A-O from Exhibit D are also present in Exhibit E. A brief explanation of additional items follows.

FARMER	Number of household heads on the completed interviews schedules who classified themselves as farmers.
ROOM COUNT	The summation of rooms reported on the completed interview schedules which can yield a village average measure of rooms per household.
ARRANGEMENT	This specifies the type of housing tenure for the household where the first category is ownership and the remaining four categories cover various forms of leasing or free occupancy.
RADIO	The number of radios owned by the surveyed households.
MALE COUNT and FEMALE COUNT	The total number of surveyed individuals grouped by sex. These add to the total of individual records. The sex ratio "wobbles" from village-to-village although generally males are dominant, as shown by the survey results for the entire country. The degree to which this village sex ratio measures sampling fluctuations or truly represents the characteristics of the village is illustrative of the problem of deriving parameter estimates based on approximately 30 household interview schedules per village. Male dominance can reflect under recording of females or selectively higher female infant and maternal mortality due to poor medical care and sex selective nutrition, clothing and medical treatment.
VISITOR	This is the count of visitors recorded in the households on the night preceeding enumeration. It is not considered to be accurate, and its tabulation caused some problems.

Notes for Exhibit E (Continued)

HOUSEHOLD-MOVED These are responses to the question which asked if the entire household moved last year. The response categories correspond not to the SUNY Code Book but to the specialized Pinkerton Provincial Reports.

BABIES LAST YEAR This is the number of recorded births including multiple births. Interviewers were instructed to emphasize that these were live births including babies who only lived for a few minutes.

INFANT DEATHS,
MALE INFANT DEATHS,
and FEMALE INFANT
DEATHS These are the cumulation of reported deaths of infants under one year.

MATERNAL DEATHS This does not appear on the village printout but is available on the tape and is a count of maternal deaths. It is also available as maternal deaths by age for 103 single year age categories.

EVER MARRIEDS This is a count of ever married women which should normally be smaller than the total female count.

MIGRATED-AWAY and
MIGRATED-INTO These refer to the number of usual household members who have left or entered the household during the past year for any number of reasons including marriage. There is no particular reason to expect these numbers to balance at the village levels. Because of the formation of new households with marriage, we might expect the migration out to exceed the migration in at the national level.

INDIVIDUAL MALES This is a single year age grouping by males and was excluded from this printout.

Notes for Exhibit E (Continued)

HOUSEHOLD SIZE This shows the tabulations on households from 1 - 14, and 15 or more members. The Pinkerton report is unclear on the source of this measure. Figures total more than the number of Household Interview Schedules but less than the total estimated number of households. It possibly comes from the household pre-list information which is independent of the HHIS data.

The remaining data on the village summary file accumulates births and deaths, school attendance, literacy by five year age categories, in and out migration of individuals by provinces and international movements. The accumulations were designed to facilitate production of the specific Pinkerton detailed reports. The age and migration distributions do not appear to correspond to the description of the data presented in the Pinkerton report. Any further detailed use of this data will therefore require more specific documentation.

SOURCES

SOURCES

General Sources

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3. Dupree, Louis, Afghanistan (Princeton: Princeton University Press, 1973).
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6. Eighmy, T.H., Geographic Aspects of Afghanistan National Demographic Survey. Demographic Research Report Series No. 11 (Kabul: Afghan Demographic Studies and Central Statistics Office, 1975). Partly reprinted in Item 9 below.
 7. Eighmy, T.H., Population and Labor Availability of Rural Afghanistan with Reference to the Helmand-Arghandad Valley Authority Washington, 1976. Report to USAID.
- Graham, S., et. al., National Demographic and Family Guidance Survey of the Settled Population of Afghanistan (Buffalo: State University of New York, 1975)
8. Volume 1: Demography and Knowledge Attitudes and Practices of Family Guidance.
 9. Volume 2: Methodology (Especially Statistical Aspects).
 10. Volume 3: Tables (Computer Printouts).
 11. Volume 5: Demographic, Social and Economic Statistics.

SOURCES CONTINUED

12. Volume 6: Occupation and Work Place Statistics (The above two items are Pinkerton Computer Consultants special computer printouts, some on a provincial basis).
13. A Provisional Gazetteer of Afghanistan. 3 Volumes. (Kabul: Afghan Demographic Studies and Central Statistics Office, 1975). See especially Introduction in Volume 1.