

Land Uses and their Effect on the Demography of Region: A Study of Three Different Areas in The South of Jordan; ash-Shawbak, Uthruḥ and Bīr Abū Danna

Introduction

Studies of land use reveal historical changes that concern both urban and rural provinces. Land use is regarded as a marker of life and of the changes that took place in the social, agricultural, economical and industrial spheres of a given province or region over time. Such studies result in deeper understanding of a given region and can assist in planning and reorganization. This study will present an analysis of documents and data pertaining to land use within a framework of the Osmanli period. The study will proceed from 1858 (the date of the application of Osmanli land law) until the end of 2002.

The regions of ash-Shawbak, Uthruḥ and Bīr Abū Danna have never been investigated, although the horizontal expansion land use in this region, and the accompanying [intensified use?] of certain applications, would suggest that studies will inevitably increase. Such studies are also expected to spotlight future developments related to surface and subsurface of water sources on the one hand, and population distribution on the other. The effect of immigration from these areas to urban towns can be vividly observed throughout the study. Further, it is possible to define and determine the impact of government policies as well as [environmental?] and social changes that determine land use in this region.

Regions of Study ash-Shawbak Province (Governorate of Ma'ān)

This is a region defined by classical agriculture and is inhabited by farmers. The region measures about 414km². The lands cover 6532.298 dunams. The lands which refer to the treasury of state are 72991.068 square dunams. These lands include about 100 springs, 52 wells and about 90 old ruins,

some of which have become agricultural or urban villages inhabited by residential complexes. The number of villages has expanded from 3 villages and 1 farm during the Osmanli time to 14 urban population gatherings and 10s of productive farms nowadays.

Lands of Uthruḥ (part of the lands of Southern Semi-Desert)

This region is considered of great importance to Islamic history. These lands are inhabited by Bedouin people (A'sheer), the majority of which belong to Al-Jazi tribe. The privately owned portion of these lands amounts to about 313.502 dunams. State-owned land amount to 6674.383 dunams including 1 spring and about 20 wells.

Bīr Abū Danna

This region is settled by Bedouin who belong to al-Nu'aymat tribe. It is difficult to separate the area from the other villages of al-Nu'aymat (unless one refers to registers of lands). In fact it consists of 1 small village of al-Nu'aymat bedouin. It is inhabited by a small population and only contains 1 spring.

Approach

The aim of the study is to present recommendations for decision-makers and planners in Jordan. In order to properly conduct the study the following factors must be considered: geographical features of the region; environmental factors: location, shapes of land, climate, temperatures, rainfall, water sources, areas of lands used for different purposes; population levels: average family size, population structure, population complexes, other variables. The analysis should assess the value of land in terms of population and other agricultural, commercial,

industrial, administrative, and tourist purposes.

There are, of course, human factors which affect the use of agricultural lands: e.g. the constructive/urban expansion; the system of agricultural title deeds; agricultural human resources; agricultural services; marketing and transportation; agricultural output.

The analysis will take into account the following historical periods:

Time period	Events and reasons for study
1858-1916	Osmanli land law — the Great Arab revolution
1917-1951	The time of establishing the Emirate and Kingdom until the end of the period of the founder king Abdullah Bin – Al-Hussein
1952-1980	The climax of financial and economical situation
1981-1996	Different social, economical and political transformations in Jordan
1991-2002	Time of stability of these transformations and their vivid effects

Method and timetable

- 1) One year: A comprehensive review of literature relating to land use will be undertaken. Other similar studies have provided useful background to the present research. Certain studies have provided statistical models which can be applied here. Further, unpublished reports and data from the Ministries of Lands and legal proceedings from ‘Ammān, Ma‘ān and ash-Shawbak on the one hand, statistics and reports from the Ministries of Education, Agriculture, Remains and Tourism, Water and Irrigation, Health, Works and housing, Royal Geographic Center, Office of Statistics, and Directorate of Remains in Ma‘ān Governorate, documents of municipalities of ash-Shawbak, Uthruḥ, Baṣṭa, Records of trade and industry from ‘Ammān and Ma‘ān, and Ministry of Interior and the General security and al-Bādiya police records may also prove useful.
- 2) One year: Developing familiarity with the registers of lands at ash-Shawbak, Uthruḥ and Abū Danna during the Osmanli rule found at the Office of Lands and Areas (‘Ammān) and others

kept in the Legal Court of ‘Ammān that are concerned with the regions of study.

- 3) 8 months: Working with the registers of current lands of ash-Shawbak, Uthruḥ and Abū Danna. This will result in a diachronic study of the structure of land-use from title deeds and other records.
- 4) 8 months of fieldwork involving survey of the three regions to record: springs (and their effectiveness), wells and their usages and inhabited complexes with reference to title deeds and/or state-owned lands of these regions. This work will help determine the dates and stages of transformations in the region in respect of the agricultural, industrial and professional projects and their effect on the local community.
- 5) One year: Analysis and documentation of 2, 3 and 4 (above) in relation to current academic study and including maps, pictures and statistical data which illustrate the diachronic and analytic approach.

The total period of study is estimated to be about five years, although some stages may be shortened if other researchers direct their work together. The process of coordination may help to shorten the time of achieving the study.

Personnel

- 1) The study requires 1 main researcher (supervisor) to direct the project academically.
- 2) This study requires 1 full-time assistant to the supervisor who would collaborate with field-researchers and co-ordinate their work and form the link between the theoretical and practical sides of the study. Mr. Mahmmoud al-Jbarat is proposed for this position.
- 3) The study requires 10 full-time field researchers (6 males and 4 females), to work at the region of study. These would be preferably academically qualified inhabitants of the regions of study (and therefore would possess acquaintance with land registers individuals and local environments).
- 4) In addition 4 full-time specialist research assistants are required to study all the Osmanli registers available at the Office of Lands, area registers found in the legal court of ‘Ammān, and any other registers and/or documents outside the region of study.
- 5) For the purpose of follow-up, the study requires a stay of some researchers at the region of study. Three of them, at least should stay for no less

than half the period of time of study. Because of the distance between 'Ammān and the region of study and because there is no regular means of transport, it is suggested that means of transportation should be available.

- 6) Other costs of administration, translation, and equipment — 2 computers, references and sources.

The proposed budget is outlined below:

Item	Per annum	Total
Salaries: Main researcher (Supervisor)	JD 12,000	JD 60,000
Salaries: Full time Assistant	JD 8,400	JD 42,000
Salaries: 10 field workers	JD 30,000	JD 150,000
Salaries: 4 M.A. Student Assistants	JD 19,200	JD 96,000
Salaries: secretary (administrative assistant)	JD 2,400	JD 12,000
Salaries: Computer officer	JD 3,000	JD 15,000
Accommodation	JD 4,000	JD 20,000
Transportation	JD 2,500	JD 12,500
Equipment _ (computers)		JD 2,000
Equipment (reference material, incl. photocopying)		JD 7,000
Equipment (stationary)		JD 5,000
TOTAL COST	JD 84,300	JD 421,500

Enclosures

List (A): which includes names of writers and title of foreign studies and researches of land applications in different places of the world.

الرقم	البيان
1	FAO. Guidelines for land – use planning. Rome: FAO, 1993.
2	LAND use mapping by local authorities in Britain: a report commissioned by the Department of the Environment. London: The Architectural 1978.
3	FAO Expert Consultation on land use planning Applications (Dec. 4-10, 1990: Rome).
4	IFAN/FAO Expert Consultation on prevention of land degradation (April 15, 1999: Rome). Prevention of land degradation, enhancement of carbon sequestration and conservation of biodiversity through land use change and sustainable land management with a focus on Latin America and the Caribbean proceedings. Rome: FAO, 1999.
5	UNESCO. The sahel: ecological approaches to land use Paris: Unisco, 1975.

List (B): which includes Osmanli registers of lands, and the names of books and studies in Arabic.

Appendix 1

Osmanli Registers of lands:

- a) Osmanli Registers of lands kept in the Office of Lands and Areas 'Ammān that pertain to the Province of Ma'ān during Osmanli legislation with the numbers:
 1/3/1 (p. 89) referring to (1906).
 1/3/2 (p. 98) referring to (1908-1910).
 1/3/3 (p. 98) referring to (1910-1917).
 1/3/2 (p. 296) referring to (1900-1910).
- b) Osmanli Registers of lands kept in the Office of Lands and Areas, 'Ammān that pertain to lands of Karak and ash-Shawbak with the numbers:
 2/3/1 (p. 389) referring to (1911-1922).
 2/3/2 (p. 345) referring to (1919-1940).
 3/3/3 (p. 392) referring to (1922-1925).
 4/3/2 (p. 406) referring to (1925-1931).
- c) Register of disbanded lands No. 4/1/4
- d) Register of lands no. 3/2/4 (p. 393) written in Osmanli language that pertain to lands of Ma'ān and 'Aqaba during 1940-1953.

Appendix 2

- a) Unpublished declarations and data of Ministries and Offices of Lands, Areas and Legal Courts in 'Ammān, Ma'ān and ash-Shawbak
- b) The statistics and reports of Ministries of Education, Agriculture, Antiquities and Tourism, Water and Irrigation, Health, Works and Housing, Royal Geographic Centre, Office of Statistics, Directorate of Antiquities in Ma'ān, Baṣṭa, Rooms of Trade and Industry in 'Ammān and Ma'ān, and the registers of Ministry of Interior and the General security and al-Badiya Police.

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9	SYMPOSIUM on the geography of the arid Zone (1962 Iraklion, Greece) land use in semi-arid Mediterranean climates. Unesco. Paris, 1964.
10	KOFOED, A. Dam. Efficient land use of sludge and manure/ edited by A. Dam Kofoed, J.H. Williams and P. L'Hermitte. London: Elsevier Applied Science pub., 1986.
11	BOUWMAN, A.F, Long-term scenarios of livestock – crop – land use interactions in developing countries/ by A. F. Bouwman Rome: FAO, 1997.
12	VINK, A. P. A. Landscape ecology and land use/ A. P. A. Vink: English translation edited by D. A. Davidson. London: Longman, 1983.
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15	CLARK, Colin. Population growth and land use/ Colin Clark. 2nd New York: Macmillan, 1967, 1980 printing.
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25	FOTH, Henry D. Soil geography and land use/ Henry D. Foth, John W. Schafer. New York: John Wiley, 1980.
26	ZAGHA, Hisham D. Development and Application of a land use design model/ by Hisham D. Zagha. 1976.
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29	SILBERSTEIN, Jane. Land – use planning for sustainable development/ Jane Silberstein, Chris Maser. Boca Raton: Lewis pub., 2000.
30	BARTELLI, Lindo Joseph, 1917 Soil Surveys and Land Use Planning/ edited by L. J. Baratelli <i>et al.</i> Madison, WIS: Soil Science Society of America Society of Agronomy, 1966.
31	STAMP, Lawrence Dudley. A history of land use in arid regions/ Lawrence Dudley Stamp. Paris: Unesco, 1965.
32	CHISHOLM, Michael. Rural settlement and land use: an essay in location/ Michael Chisholm. 3rd ed. London: Hutchinson, 1974.
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34	ECONOMIC, activity and land use: the changing information base for local and regional studies/ edited by Michael J. Healey. New York: Longman, 1991.
35	SABA, Mona Yousef. The impact of land use on soil degradation for some selected soils in al-Muwwaqar area/ by Mona Yousef Saba: (supervised by) Awni Y. Taimeh. 2002.
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