Macro level characterization of Historic Urban Landscape: Case study of Alwar walled city

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ABSTRACT

Globally, old and historic settlements exhibit efficient urban planning in terms of compactness, walkability, energy efficiency and social cohesiveness. However, with the passage of time, usually a city's old settlements undergo numerous socio-economic and physical transformations leading to an urban chaos. The walled city of Alwar in the state of Rajasthan is selected as a representative case study of a medium-sized historic city with a rich cultural past. Alwar is one of the regional priority towns in National Capital Region Plan-2021 of Government of India and is proposed to be an important magnetic centre for the region. The walled city area and its old neighbourhoods portray unique features of a Historic Urban Landscape (HUL). The study identifies the core urban elements of its HUL and Arc Map-10.1 is used to spatially map characteristics of its old neighbourhoods, commercial areas, road network, open spaces and intangible heritage. Figure Ground Analysis and Development Trends Analysis are carried out based on primary surveys, reveal changing housing needs and economic requirements. The study concludes that the traditional residential culture of mohallas and chowks and their rich heritage should be included in the development plans of government with a focus on community-based regeneration rather than tourism alone. This may ensure a socio-economic and environmental sustainability in the long run for such historic settlements.

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1. Introduction

Cities are the society's focal point where the human interaction, diversity, culture and commerce flourish. The several layers of cultural history and growth result in a city's rich past, present as well as its future (UNESCO, 2010; Samani, Salehi, Behbahani, & Jafari, 2011). The fabric of a historic town is not just based on its physical form and structure but also connects various attitudes and activities, giving it a unique identity of relevant human interests. Cities that are the most successful are able to attract investment and businesses to meet the aspirations of their citizens while alleviating poverty, promoting inclusion of society and their heritage (Licciardi & Amirtahmasebi, 2012). However, these city cores are mostly prone to undesirable and consequential effects of rapid urbanisation and intense development, creating waves of metamorphic change; threatening the inherent values and cultural

heritage of the city which necessitates the need for urban conservation and rehabilitation to act as a catalyst to promote social interaction between its inhabitants, further encouraging vitality of these communities by looking into their rich past and identifying their beginnings, growth and multiple layers of development (Evans & Shaw, 2004).

Urban fabric or the web is more or less a result of urban experiences, which are key to human settlements, culture, and society (Cohen, 2010). These material organization of urban space is crucial to producing social and economic arrangements in any city. Elements of urban form tend to mediate physically and spatially with its social, economic and environmental setting (Lynch & Rodwin, 1958). Hence, any city is a result of complex relationship among its socio-economic, spatiotemporal and environmental processes and practice (Tonkiss, 2013). Urban Web, in general, relates to cities as webs or lacework, containing patterns and weaves, based on physical entities, those which tend to be permanent by nature. These patterns dictate much of the resulting potential for any population, their ideals or aspirations, which may change periodically (Cohen, 2010). Recognition of urban fabric and its elements

allow basic identification, documentation, and possible analysis in a given context.

Currently, India's attention is focussed on the urbanisation imperative and the Smart Cities Mission is gaining ground rapidly. The urbanisation agenda is covered in two parts: urban rejuvenation of 500 Indian cities and the implementation of 100 Greenfield and Brownfield smart cities (Ministry of Urban Development, 2014). International Organisations such United Nations Educational, Scientific, and Cultural Organization (UNESCO) and World Bank have advocated the need for a social and inclusionary approach for historic cities for a sustainable revitalization of old communities (Suri, 2007). In the present context, the main research query is how efficient and sustainable is the urban fabric of existing historic cities and what traditional planning principles still hold true.

The present study focuses on Alwar walled city as a representative case study of a historic town which was laid out more than 200 years ago based on Indo-Islamic traditional principles. The city currently acts as an important magnetic centre in the National Capital Region (NCR) Plan 2021 of Government of India (GoI) (Fig. 1). Alwar is also known as the *'Gateway to the historic and colourful state of Rajasthan'* having a variegated history of almost 19 generations of rulers ruling the city. The historic and eminent fort on highest Mewat Hills of ancient folded mountain range of Aravalli in Alwar is reminiscent of the regal way of life and being one of the most prominent regional centres for various social, cultural and economic activities for the entire territory.

The study analyses the characteristics and potential of old walled city of Alwar with key objective to understand the urban transformation of city's core area over the years and identify the core elements of its historic urban fabric using GIS as spatial tool. The study intends to recognise the key elements of Alwar's historic urban fabric based on comprehensive literature studies and

persuades the future government programmes to adopt an inclusionary approach for smart urban rejuvenation.

2. Literature review

2.1. Conceptual shift with respect to historical cities

Over the last decades, several international bodies, such as UNESCO, The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and The International Council on Monuments and Sites (ICOMOS) are involved with important programs of conservation of neglected heritage precincts. Initially, in Europe an individualistic approach of passive conservation of individual heritage monuments which were considered in isolation from their surroundings was prominent (Steinberg, 1996). Also, the mass destruction of historic cities in Europe during World War II led to the rebuilding of older urban areas and tried to treat them sensitively. At the same time, a contemporary school of architecture with importance to bulldozer approach of construction was highly criticized across Europe and North America because of its indiscriminate destruction ideologies (Steinberg, 1996). Gradually the creative use and re-use of older quarters of the city taken as a whole allowed the old communities to flourish, with a scope for both built environment and traditional social systems to gain importance.

Since the 1930s, U.S. federal government legally designates historic districts through the United States Department of Interior under the auspices of the National Park Service. A Historic District or Heritage District (HD) is defined as a section of the city comprising older buildings with valuable historical or architectural value (Local Preservation: a service of the National Park Service 1993). In Canada, concept of Heritage Conservation Districts is followed to legally protect historic sites and complexes varying in
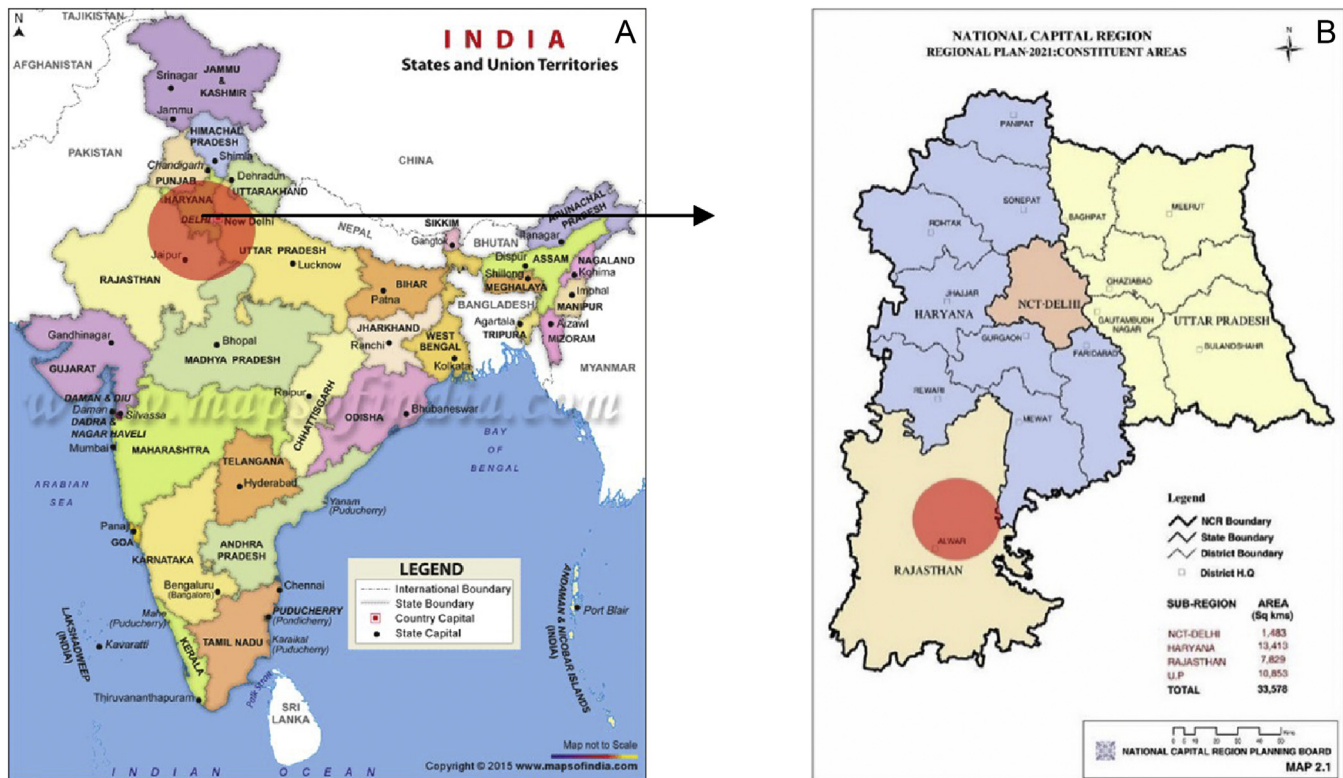

Fig. 1. Location of Alwar city in NCR Plan 2021. Source: http://www.mapsofindia.com/ accessed on 14th April 2016; http://ncrpb.nic.in/ncrconstituent.php accessed on 14th April 2016.