

2 REGIONAL CONTEXT

2.1 BACKGROUND

- There is international acceptance of taking the regional context into account while planning cities. Chandigarh had pioneered the conceptualization, planning, legislating and reserving land for future urban growth , thus introducing the regional context into the city plan. The reserved land in the periphery was meant to serve the city with its agricultural produce, and later, to accommodate future population growth. That this provision was hijacked on account of various compulsions has already been discussed in the preamble to this report. This chapter elaborates on the way to move forward, putting into context, the perspectives outlined below.

  (i) The perspectives of Punjab, Haryana and Chandigarh U.T. Regional Growth Strategy.
  (ii) Options for Chandigarh.
  (iii) Issues of commonality.

- Historically 70 sq. kms of land was acquired between the rivulets Patiali ki Rao and Sukhna Choe for Chandigarh's Plan, incorporating mechanisms for control and regulating development. This exercise entailed acquiring land of 17 villages and resettling the villagers elsewhere. During land acquisition for Phase II, the villagers agitated to stall their dislocation which culminated in villages being retained within the sectoral grid.

Later, forces of urbanisation acted on the periphery, leading to a number of planned interventions such as the establishment of the towns of **Panchkula , Chandimandir Cantonment, HMT Township and Mohali.** With them came a number of organic developments in the periphery on the doorsteps of Chandigarh.

Specifically the outward expansion followed a sequence of actions:

a) A new capital for Punjab was approved in 1949. This incorporated:

i. The Chandigarh Master Plan area of 70 sq. km in two phases (1951).
ii. A Periphery Control Area for a 8 km radius around the Chandigarh Plan Area (1952) and
iii. An expanded Periphery Control Area for a 16 km radius around the Chandigarh Plan Area (1962).

b) The state reorganisation in 1966 involved restructuring a) above into:

i. Chandigarh Union Territory 70 sq. Km + 44 sq. Km = 114 sq. Km.
ii. Punjab component of the Periphery Control Area = 1021 sq. Km.
iii. Haryana component of the Periphery Control Area = 295 sq. Km.

c) The Chandigarh Urban Complex (CUC) was created by the Ministry of Urban Development, Government of India in 1975 this incorporated

i) the Chandigarh UT and
ii) a reorganised CUC boundary in lieu of the 8 km radius mentioned in para a).

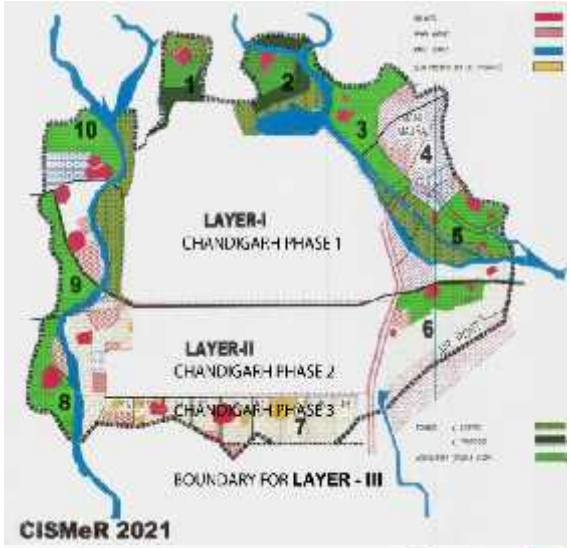
d) The Chandigarh Interstate Capital Region (CISCR) as created by the Central Town & Country Planning Organisation in 1984 which incorporated

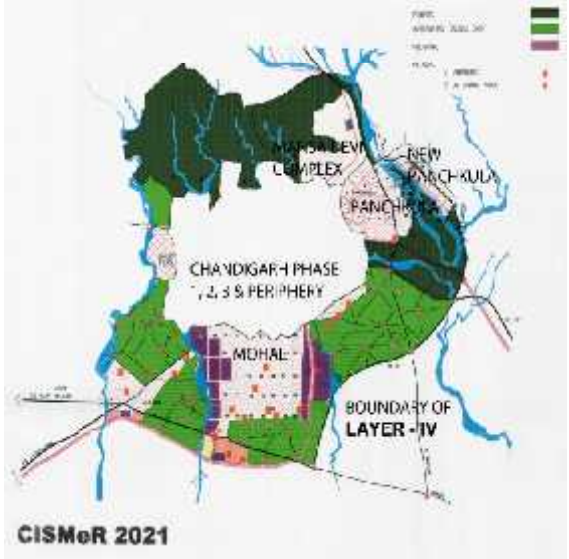
i) the Chandigarh UT
ii) the CUC (outside the UT)
iii) the 16 km radius Periphery Control Area (outside CUC) and portions beyond the 16 km radius in Punjab and Haryana. This total area measured 2431 sq. km.

e) The Chandigarh Interstate Metropolitan Region (CISMeR) Plan comprising of **50 km radius** falling outside Phase I of Chandigarh and consisting of 10 tehsils (Punjab 4, Haryana 3, Himachal Pradesh 3). The Plan comprised of six Layers with the 50 km radius being Layer VI and Phase II being Layer II, Phase III being Layer III. A new Layer of 345 sq. km outside Layer I, II and III and named as Layer IV and, Layer V consisting of 16 km radius Periphery Control Belt of 1962.

Each of these layers was meant for a specific size of population. Map 1 to 4 show the 6 layers envisaged in the plan.

MAP 1 SHOWING LAYER III OF CISMER PLAN





MAP 2 SHOWING LAYER IV OF CISMER PLAN

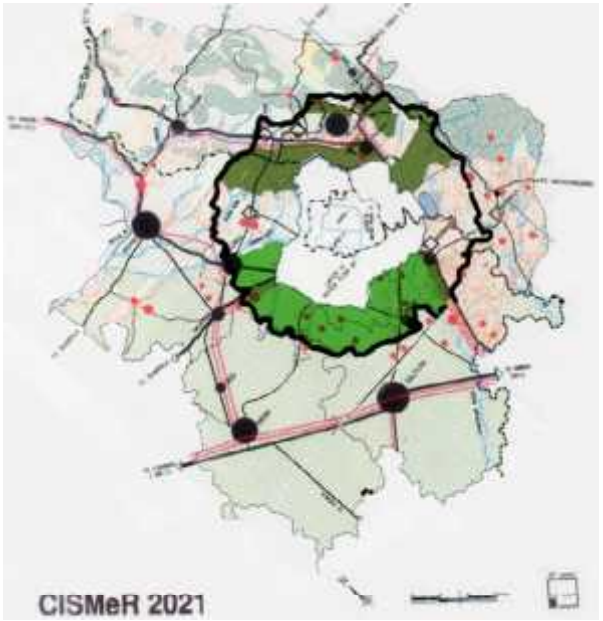
2.2 REGIONAL GROWTH STRATEGIES, PUNJAB, HARYANA

- **PUNJAB REGIONAL GROWTH STRATEGY**

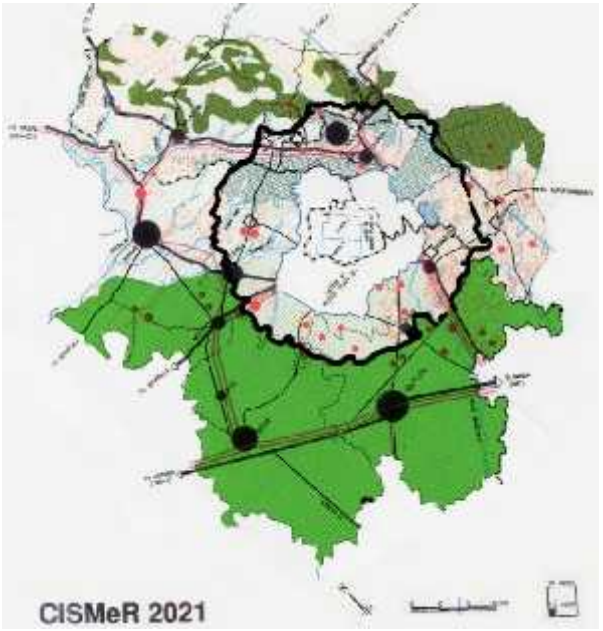
Punjab has created a Greater Mohali Regional Development Authority (GMADA) to prepare an Integrated Plan for 1190 sq. km region around Chandigarh, part of which extends beyond the earlier defined 16 km radius and excludes a minor territory (Kansal & Naya Gaon) in Punjab abutting the Capitol Complex north of Chandigarh (**see Map 5 and 6)** for Greater Mohali Region and Naya Gaon abutting Capitol Complex).

The Integrated Development Plan under GMADA **Map 7** has jurisdiction over 6 Local Planning Areas (**Mohali / Kharar / Banur / Zirakpur / Dera Bassi/ Mullanpur**) each of which has been conceptualized as a HUB for a distinct economy / sector and for which independent plans have been prepared after envisioning their development agenda / defining their Land Uses and integrating them through a network of expressways / road ways / air & rail connections etc. (**see Map 8 to 11** for independent local plans).

MAP 3 SHOWING LAYER V OF CISMER PLAN



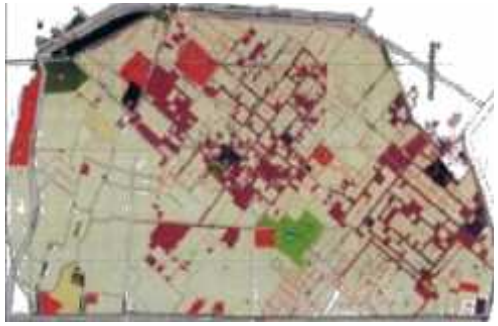
MAP 4 SHOWING LAYER VI OF CISMER PLAN



MAP 5 SHOWING GREATER MOHALI REGION WITHIN AND BEYOND 16 KM PERIPHERY CONTROL AREA



MAP 6 SHOWING NAYAGAON N.A.C. NEAR CAPITOL COMPLEX



These developments were notified under **Punjab Regional Town Planning and Development (Amendment) Act 2006** and approved by the Punjab Government in 2008. The plans were prepared by the International Consultants Jurong Pvt. Ltd. based in Singapore.

Effective Zonation has been done for Agriculture / Forests / Industry / Urban & rural settlements / Transport & Communication / New Towns / Road Network. Each Local Plan has designated Densities / Uses / Zoning Regulations. Later, the township of Lalru has been identified and is likely to get a Local Plan in the near future.

- **Haryana Regional Growth Strategy**

Haryana adopted the Punjab New Capital (Periphery) Control Act, 1952, in 1968 with modification (the Periphery Controlled Area was notified vide Notification No. 2415-IV DP-**72**/1329 dated 21.3.1972 published in Haryana Government Gazette on 4.4.1972). Under the operation of the Haryana Portion of the said Act, chronologically some developments were taken up as under:

Preparation of the Ist Development Plan for taking up Panchkula Project as an Urban Zone (based on Drawing NP PO (P)115/**72**). Other projects shown as **Special Projects Zone** were **Chandimandir Cantonment** and **HMT township**. Besides these, the **Terminal Ballistic Research Lab (TBRL**) also got established.



MAP 8 LOCAL PLAN MULLANPUR NODE



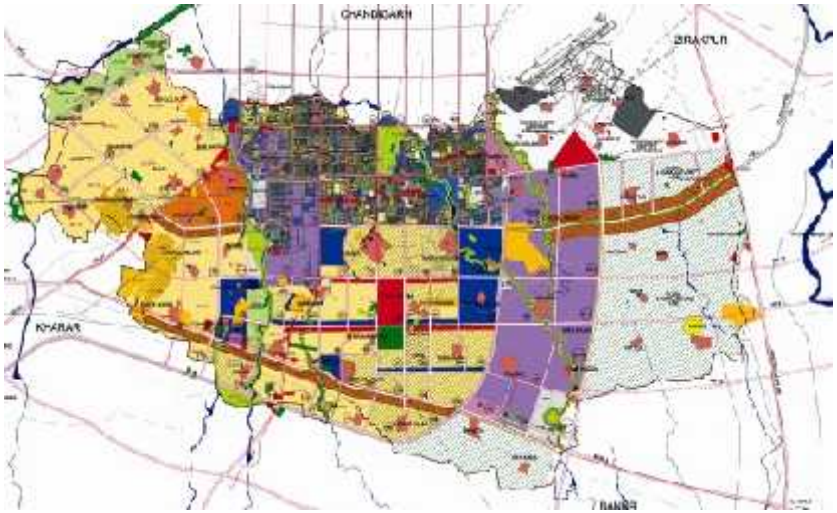
MAP 7 DEVELOPMENT NODES OF GREATER MOHALI REGION



MAP 11 LOCAL PLAN MULLANPUR NODE



MAP 9 LOCAL PLAN KHARAR NODE



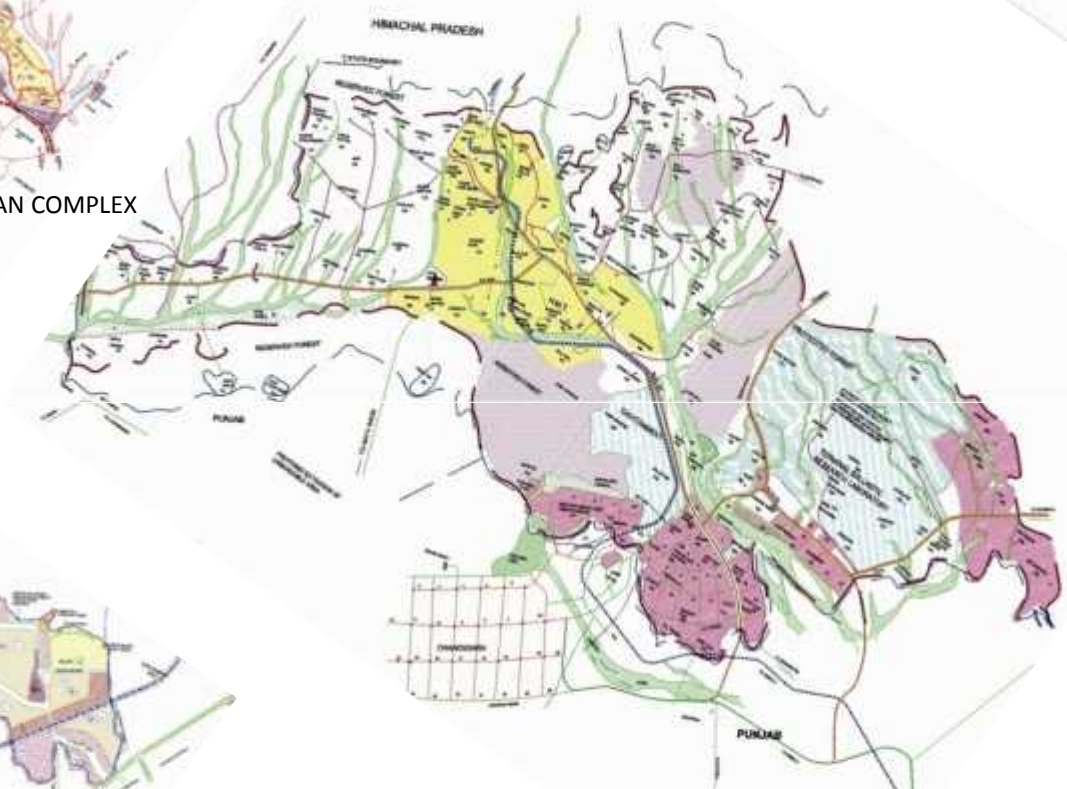
MAP 10 LOCAL PLAN MOHALI



MAP 13 PINJORE KALKA URBAN COMPLEX



MAP 15 PANCHKULA EXTENSION



MAP 12 DEVELOPMENT PLAN HARYANA PORTION



MAP 16 PANCHKULA



MAP 14 SHRI MATA MANSA DEVI COMPLEX



MAP 17 KOT BEHLANA ALIPUR URBAN COMPLEX



- New Urban Zone of **Shri Mata Mansa Devi Complex** was designated (Drawing No. CTP (P) 617-A/**83**) and the existing stone crushers (Bana Madanpur) were shifted to **Stone Crusher Zone Burj Kotian.**

- **Panchkula Extension** was incorporated (Drawing NO. DTP (P) 155/**89**) as a new Urban Zone.

- Further addition of Urban Zone were made (Drawing No. DTP (P) 597/**2000**) of the **Pinjore Kalka Urban Complex** and **Kot Behlana Urban Complex.**

- The latest amendment in 2009 incorporates modification to **Pinjore – Kalka Urban Complex, Panchkula Extension and Kot – Behlana Urban Complex.**

(See Map 12 for consolidated Regional Plan of Haryana portion in the periphery and Map 13 to 17 for five different Local Plans).

Provisions were also made for environmental protection due to the sensitive topography of Shivalik Hills, Kandi belt, plains and river belts, plus the Reserved and Protected Forests & Wild Life Sanctuaries in this zone. The Agricultural Zones were also defined.

Chandigarh (UT) Regional Growth Strategy

a) Land available for **Phase-III** within the UT and as part of periphery constitutes **44 sq. kms**. This has partly been developed as medium size / high density residential within **13 sectors** in the form of group housing development, alongwith proposed high rise commercial / institutional blocks (to service the population) and located on V2 Vikas Marg of Chandigarh and abutting Mohali. **The sectors of Chandigarh link up with Mohali's sectors.**

Total land under all Phase-III sectors (and including the land under two villages Kajheri / Palsora) is 7.5 sq. km.

b) In the absence of a master plan, a lot of land lying outside the sectoral grid and located in both parts of the trans Sukhna Choe (in the east) and trans Patiali Ki Rao (in the west) has been developed over the years to accommodate city's growing needs for various purposes in a fairly adhoc manner. The following projects have been developed :

Trans Sukhna Choe

- IT Park towards Manimajra and behind the Sukhna Lake
- Pockets in Manimajra Urban Area
- Slum Rehabilitation at Mauli Jagran/Indira Colony/Raipur Kalan
- Village expansion within the periphery
- Industrial Area Phase-III

Western portion

- Sarangpur Institutional Area
- Milk Colony Dhanas, Residential-cum-Cattle Farm
- Botanical Garden, Sarangpur
- Landfill site and Garbage Processing Plant in Dadumajra
- Vocational Training Centre
- Slum Rehabilitation in Maloya / Dadu Majra / Dhanas
- Village expansion within the periphery (6 villages).

Of the total 44 sq km land available in the periphery control area with UT Chandigarh, land under Phase-III sectors constitutes 8 sq. km with the uncommitted undeveloped land in the remaining 36 sq. km distributed over 17 pockets. This includes land under the 14 villages **(see Annexure RCI).** Thus the total land available for any dispersion of population, jobs, housing and other civic utilities, facilities and amenities outside of the planned sectoral grid of Chandigarh is 2658 acres.

- **The Co-ordination Committee for Development of Chandigarh**, realizing the fact that Chandigarh is now a **Metropolis** confronted with the **issues of the Inter-state regions,** has taken the initiative to prepare an **Inter State Regional Plan** for Chandigarh for the purpose of integrated planning and implementation and for maximizing the benefits to all. In particular, there are contentious issues of addressing regionally, the components of **Water Supply/Landfills for SWM/ Underground Drainage / Transportation and Inter City Connectivity**: other issues related to **'Housing for all'.**

Similarly **conservation and safeguarding of the natural and built environment** is important as is the **social infrastructure availed by all in the region. It is also prudent to consider the region for introducing the MRTS within the urban structure of Chandigarh and its adjoining urban region.**

In brief, the Regional Plans should be preferred and accorded statutory backing through the establishment of a Board *(like the NCR Board).*

MAP 18 POCKETS OF UNDEVELOPED LAND IN THE PERIPERY
(Excluding vacant pockets of Manimajra)





2.3 A CONSOLIDATED VIEW OF THE PERIPHERY

Given interdependence for the three reference regions mentioned above for serving the projected demands for critical physical and social infrastructure, Chandigarh UT has determined its own demands but has no influence over the demands generated outside its boundaries. It is usual that a mother city becomes the area for performing the core functions and fulfilling demands specially of social infrastructure at the regional level. So is the case with trade and commerce. It is natural to seek bigger markets, better education, dependable healthcare which is only available in Chandigarh. Effects of this demand are felt strongly in the transport sector resulting in congestion on some arterial roads specially at peak times. Floating population and daytime visitors also make demands on water supply and sanitation. These critically affect the day to day problems related to infrastructure.

The CMP 2031 expects a symbiotic relationship with the regional urban areas. It expects that the three partners in development, Punjab, Haryana and Chandigarh UT, should have an understanding and coordination between themselves for sharing key responsibilities for locating some of the spillover infrastructure components of Chandigarh in their territory in view of the land constraints within the city as well augment the physical and social infrastructure in their respective towns to reduce the pressure on Chandigarh. A sensitive and coordinated development is required to safeguard the regions natural and man made heritage.

i. The current Chandigarh Master Plan 2031 alongwith the GMADA Plan 2056 and the Haryana Development Plan should together arrive at a METROPOLITAN PLAN for the perspective year 2031.

ii. The area distribution in the periphery is as under:

Chandigarh	**44 sqkm**	**(3.23%)**
Haryana	**295 sqkm**	**(21.70%)**
Punjab	**1021 sqkm**	**(75.07%)**
Total	**1360 sqkm**	**(100%)**

iii. The integrated elements of the three independent Plans, *(called the "METROPOLITAN PLAN")* which should collectively form a "Public Transport Strategy" mutually agreeable to all.

2.4 ISSUES OF COMMONALITY WITH NEIGHBOURING STATES

- Need for a Comprehensive Plan for Environmental Protection
- Protection of forest cover in the Shivalik Hills and other such natural areas
- Protection of water bodies and seasonal rivulets against water pollution and waste disposal
- Facilities and services to provide for collection, treatment, disposal of sewage and other chemical and municipal wastes of the community.
- Planning against pollution, avoiding new problems in the future in the course of development and redevelopment.
- Legislating for effective controls to be placed for pollution.
- Air Control Zones
- Noise Control Ordinance
- Road Traffic and Exhaust Emission Standards



- Control of Pollution of Streams & Rural Areas and by Animal Wastes.
- Education and Public Awareness Campaigns.
- Effective Solid Waste Management.
- Disaster Management Plans.
- Augmentation of Green Cover.
- Declaration of Eco Sensitive Zones around Wildlife Sanctuaries.
- Declaration of Agricultural Zones.
- Preparation of Sukhna Management Plan.
- Declaration of Areas and Vistas of scenic value and prevention of any high rise developments in light of the recommendations of the Expert Heritage Committee.
- Declaration of Natural Heritage Zones.
- Decentralization of bulk material markets (Grain/ Fruits/ Building Materials/ Warehouses etc.).
- Dispersion of state level offices to locations outside of Chandigarh.
- Safeguarding the backdrop of the hills and siting of the Capitol Complex.
- Creation of Land Information Systems and use of GIS Technology for basic Mapping System. Institution of a **Committee for Land Protection/ Land Production and Inventory of Scarce Land Resources/ Sensitive Zones.**
- Accurate Mapping of Boundaries of all Sub Regions and Divisions.
- Preparing an International Airport Development Strategy.
- Coordinated development of southern sectors bifurcated by the interstate boundary.
- Creation of a bypass road around Chandigarh to prevent unwanted through traffic.
- Synchronisation of road geometrics /sections/landscaping/ROW of intercity roads.
- Ensuring no direct opening onto regional roads to enable seamless interconnectivity.
- Coordinated interstate bus transport and public transport modes.
- Advertisement and signage control along regional roads.
- Slum free region /affordable housing.
- Ensuring orderly /coordinated built environment /urban design at entry to city.

2.5 OPTIONS FOR CHANDIGARH

- The CMP 2031 has projected a population of 16,00,000 persons. Of these, nearly 6,16,031 are expected to be contained within the existing 47 sectors within Phase I and II; these constitute 38% of the total projected population.
- Remaining 9,60,000 persons (60%) are expected to be housed partially in the Sectoral grids of 48 to 56 as well as parts of Sectors 61 and 63, and partially in the remaining Periphery in 17 designated pockets.
- The quality of these neighborhoods shall imply a much higher density *(averaging at nearly 175 persons per acre)* than the sector neighborhoods of both phases and special measures shall have to be taken to ensure the availability of adequate physical and social infrastructure at par with the rest of the city.



- **The Master Plan recognizes that land available with the UT in the Periphery has to be judiciously utilised to enable the sustainable development of the city.**
- **Chandigarh shall have to strategize on imposing a severe limitation to locating large scale industries , high bulk material stores requiring heavy freight containers etc for transportation on the fragile and limited land resource available to it.**
- The location of Warehousing and Logistics Parks shall have to be determined based on mutual understanding between the neighboring states, *(there being a specific need for them in the region).*

- **INFRASTRUCTURE REQUIREMENTS**

The infrastructure demands for CMP 2031 are as follows:

Water Supply	800 MLD
Solid Waste Management	800 Metric Tonnes
Mandatory area to be reserved for greens	9400 Acres