



Country profiles and requirements “Lebanon”

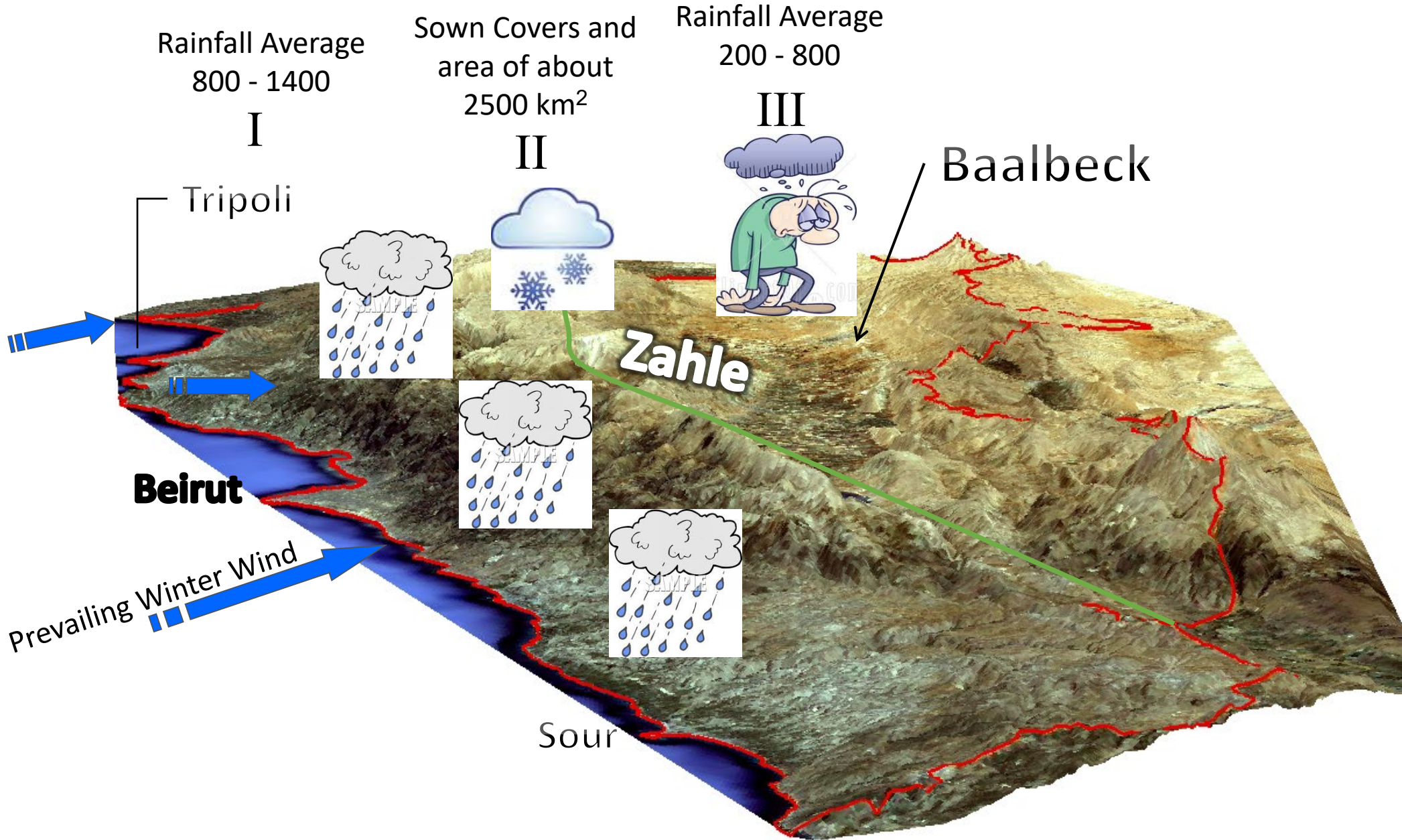
Ihab JOMAA

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Director of Tal Amara Research Station
Lebanese Agriculture Research Institute (LARI)

Regional training workshop for satellite crop
monitoring using the CropWatch system

7 - 10 August 2023, Ambre Hotel, Mauritius

Agriculture Based on Location, Land Availability and MicroClimate





Répartition de la Superficie des Cultures Permanentes et Saisonnières

توزع الزراعات الدائمة والمؤقتة

Superficie des Cultures Permanentes et Temporaires

مساحة الزراعات الدائمة والمؤقتة

حجم القرص: 5000 هكتار Taille= 5000 Ha

زراعات دائمة Cultures permanentes
زراعات موسمية** Cultures temporaires**

SAU* / Superficie totale caza

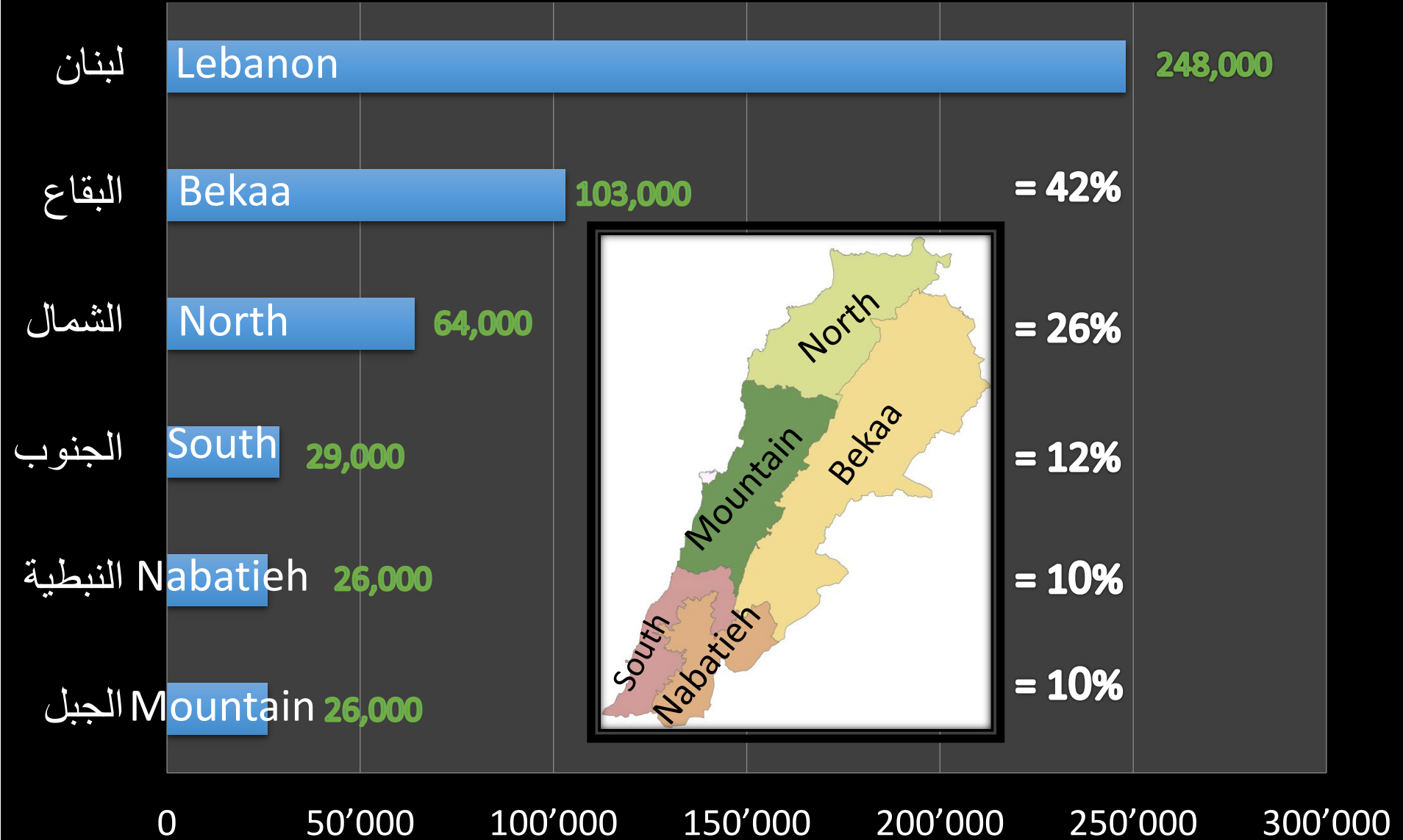
المساحة المزروعة المستغلة / المساحة الاجمالية بالقضاء

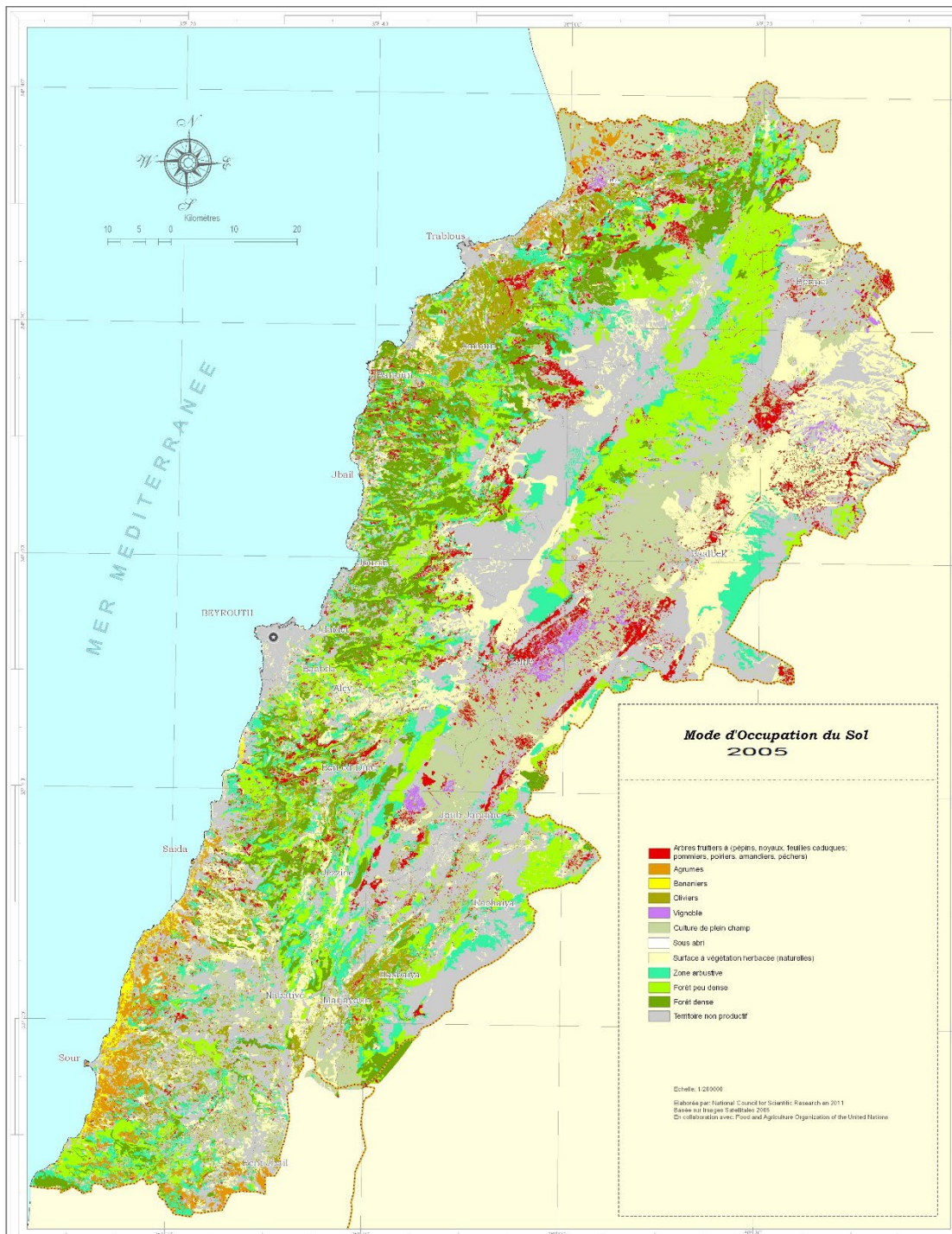
أقل من 15% < 15 %
من 15 الى 25% 15 - 25 %
من 25 الى 40% 25 - 40 %
أكثر من 40% > 40 %

* Superficie Agricole Utile

** Y compris les différentes successions de cultures
وتشمل مساحات الزراعات المتعاقبة

المساحة المزروعة (هكتار) ضمن الخمس محافظات في لبنان لعام 1999





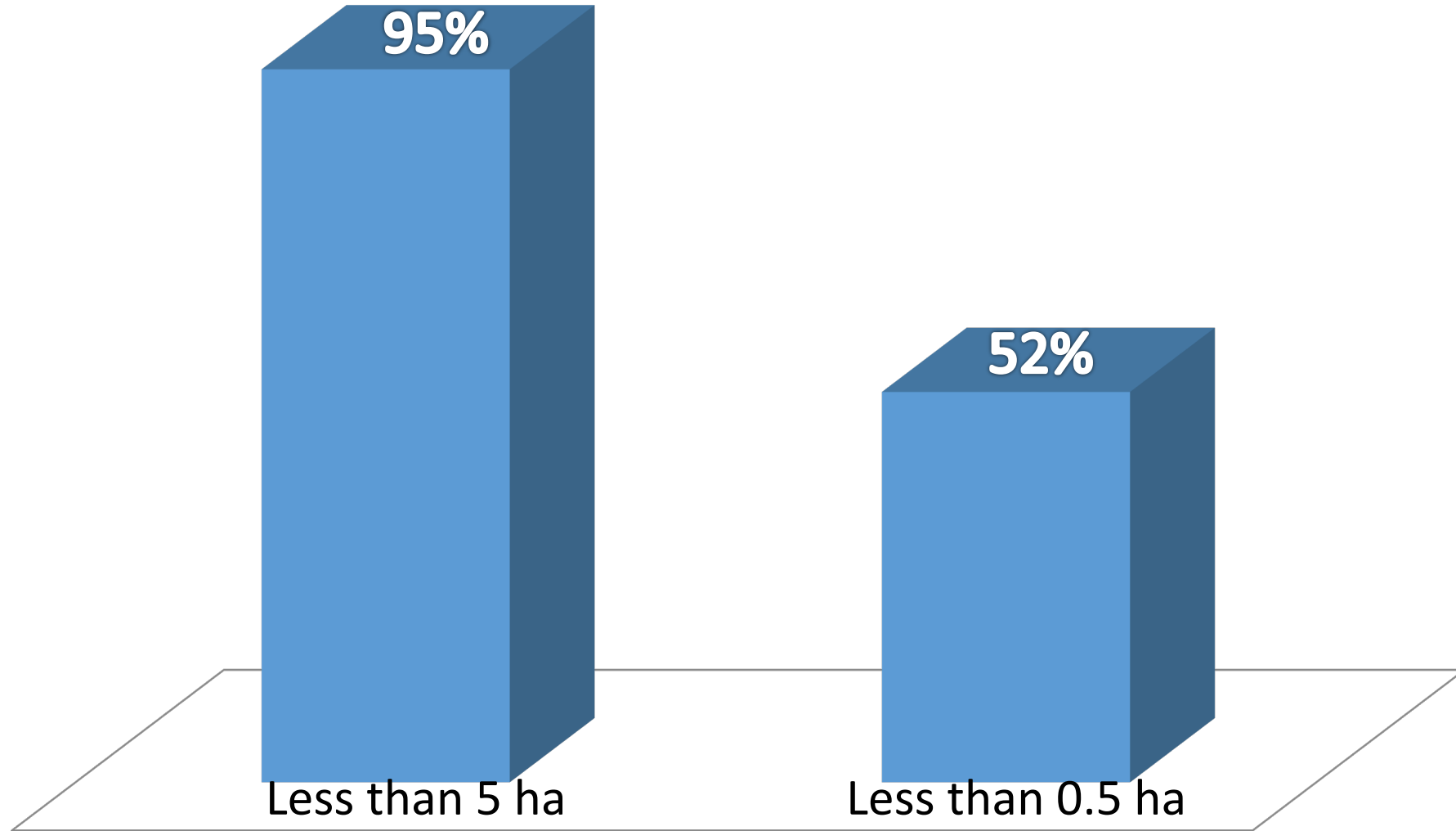
Mode d'Occupation du Sol 2005

- Arbres fruitiers à (pépins, noyaux, feuilles caduques; pommiers, poiriers, amandiers, pêchers)
- Agrumes
- Bananiers
- Oliviers
- Vignoble
- Culture de plein champ
- Sous abri
- Surface à végétation herbacée (naturelles)
- Zone arbustive
- Forêt peu dense
- Forêt dense
- Territoire non productif

Echelle: 1:200000

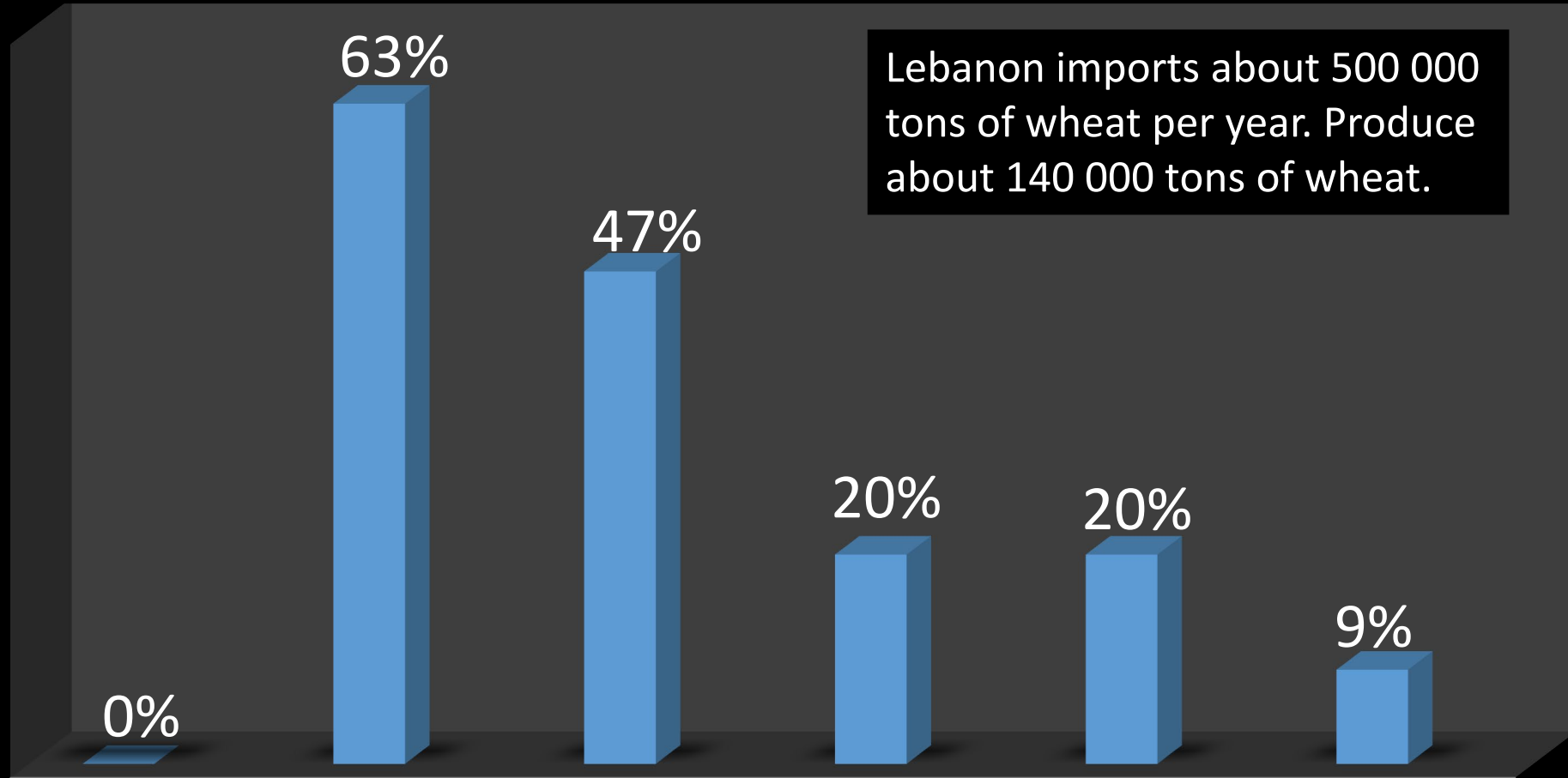
Elaborée par: National Council for Scientific Research en 2011
Basée sur Images Satellitaires 2005
En collaboration avec: Food and Agriculture Organization of the United Nations

Land Fragmentation



Self-Sufficiency of Lebanon

Lebanon imports about 500 000 tons of wheat per year. Produce about 140 000 tons of wheat.



حليب
مجفف
Dried
Milk

حليب
Fresh
Milk

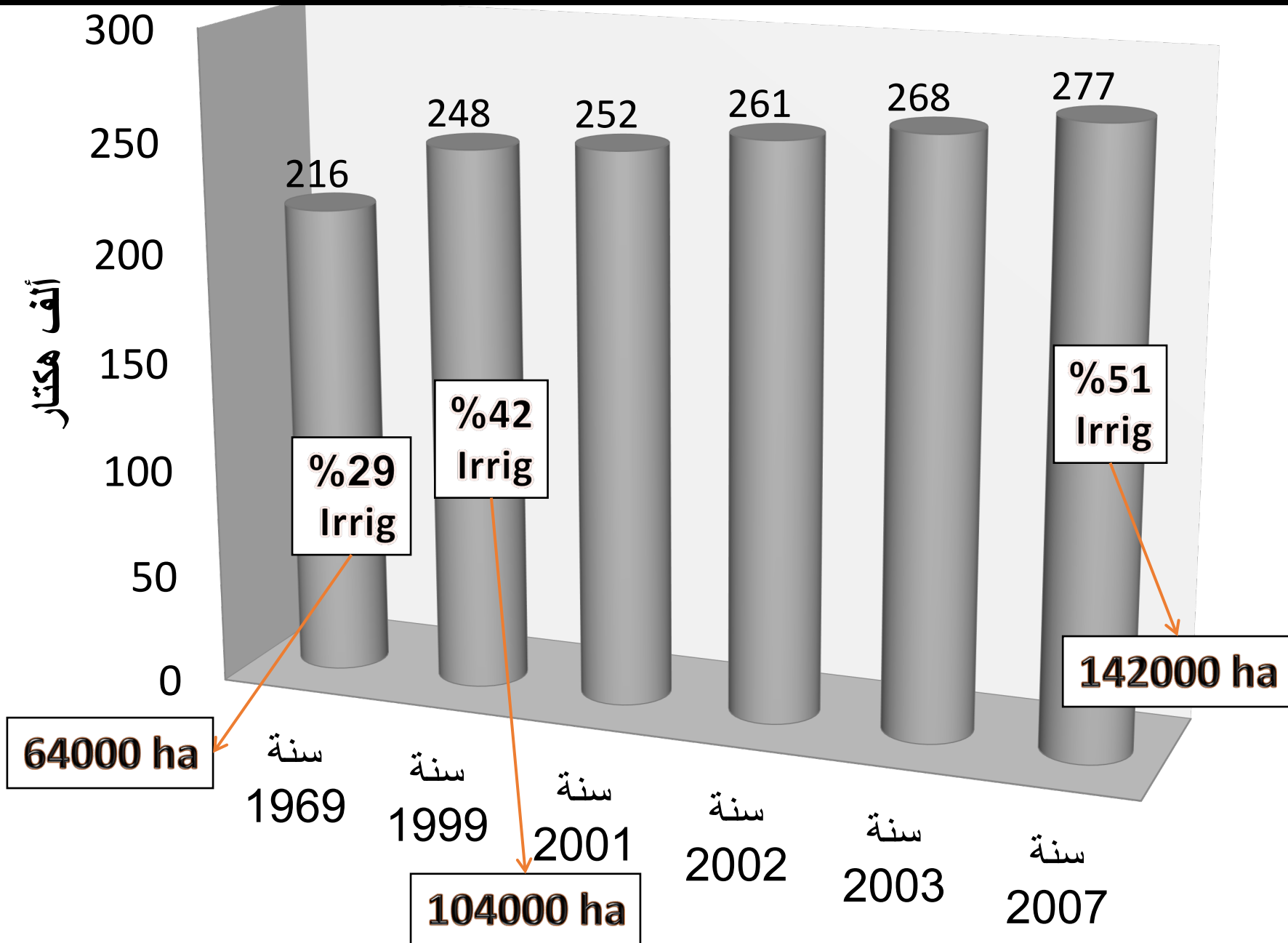
أجبان
Dairy
Products

قمح
Wheat

لحم غنم
Other
Meat

لحم بقر
Bovine
Meat

Cultivated Land vs Irrigated Land



Projects

- ESA NoR Project with CNRS: Create a 5-years Lebanese dataset for winter wheat
- Landcover map of Lebanon at CNRS
- Joint Laboratory of Modern agriculture and water Management" between CNRS Lebanon and (Aerospace Information Research Institute- Chinese Academy of Sciences)
- NASA Harvest Field Boundary Detection Challenge, with CNRS

Challenges/Requirments

- Agriculture Census is rarely accomplished and it became very limited to few areas
- Crop management is not accomplished, leaving farmers face losses
- Water shortages is aggravating; fresh water mostly used for agriculture; low water productivity
- Agriculture lands are getting into urbanization areas

Expectations

- Able to monitor crops in more efficient manner and in better frequency
- Irrigated agriculture being spotted
- Able to estimate yield, especially for cereals
- Estimate crop evapotranspiration
- Monitor green areas (forests, etc)

Thank you

