CONFIGURATIONS

Among the four possible production configurations, crop-livestock integration is the most commonly used by producers.



GROWING TECHNOLOGY

In ten years, the area occupied by **ICLF** has increased by almost 10 million hectares. The figure below shows the expansion of this production system, acording to the ABC Platform, considering a linear evolution between 2005 and 2015.



Evolution of the area occupied by **ICLF**, in millions of hectares Source: ABC Platform

COMMITMENTS

The goal set by the Low-Carbon Agriculture Plan (Plano de Agricultura de Baixa Emissão de Carbono – ABC Plan) in 2009 was to increase the area with **ICLF** in Brazil by four million hectares by 2020. According to the preliminary estimate of the ABC Platform (a multi-institutional group created to monitor the reduction of greenhouse gas emissions), between 2010 and 2015 the increase of 5.96 million hectares of **ICLF** was responsible for the sequestration of 21.8 million tons of CO₂ eq.

The ratification of the Paris Agreement on Climate change by the Brazilian Government in 2016 increased by 5 million hectares the original goal of farmland with ICLF systems proposed in the ABC Plan, with a total goal of 9 million hectares by 2030.







WHAT IS ICLF

Integrated crop-livestock-forest (ICLF) is an agricultural production strategy that integrates these different productive systems within the same area. It can be implemented using mixed, rotating, or successive crops so that the interaction between each component generates mutual benefits.

ICLF can be implemented in different ways, with a wide range of crops and a variety of animal species. It can be adapted to regional characteristics, climatic conditions, local markets and farmer's profile, and can be adopted by small, medium and large producers.

ICLF can be used in different configurations, combining two or three components in one production system:



ICL - Mixed farming **ICF** - Agroforestry **ILF** - Livestock-forestry ICLF - Crop-livestock-forestry

THE ICLF NETWORK

The **ICLF Network Association** is a public-private partnership formed by Embrapa, the Cocamar cooperative and the companies Bradesco, Ceptis, John Deere, Premix, Soesp and Syngenta. It aims to accelerate a wide adoption of the integrated crop-livestock-forest (ICLF) technologies by rural producers as part of an effort aimed at the sustainable intensification of Brazilian agriculture.

Started in 2012, the **Network**, which is co-financed by private companies and Embrapa, supports a network of 16 Technological Reference Units and 12 Technological Reference and Research Units distributed in all Brazilian biomes and involves the participation of 28 Embrapa Research Units.

BENEFITS



Optimization and intensification of soil nutrient cycling



Improvement of animal welfare due to greater thermal comfort



Applicable to farms of all sizes and profiles



Greater optimization of production processes



Reduced pressure for opening new agricultural land



Improvement of the

quality and

Biodiversity

conservation

and sustainable

agriculture



Reduction of labor seasonality and rural exodus



Creation of direct and indirect jobs



Mitigation of greenhouse gas emmissions



Increase in net income allowing greater capitalization by the producer



Increased production of grains, meat, milk, timber and non-timber products from the same area



Greater efficiency in the use of resources and increased energy balance



Improvement of the public image of farmers within society



Increased economic stability through reducing risk and uncertainty by diversifying production

Research commissioned by the ICLF Development Network and carried out by the Kleffmann Group during the 2015/2016 harvest estimated that in Brazil integrated agricultural production systems are implemented in 11,468,124 hectares (ha) of land.





ICLF IN BRAZIL