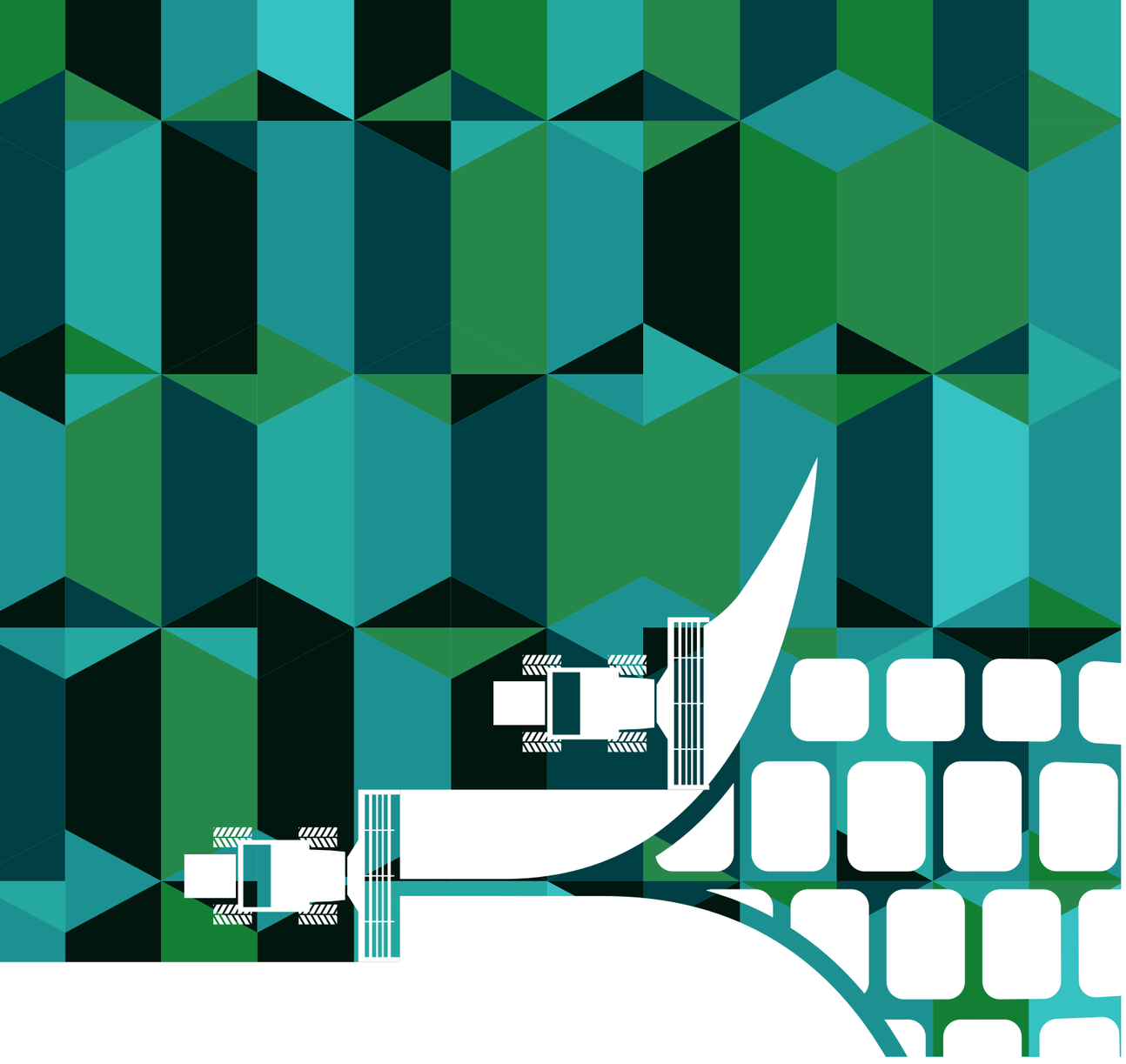
Rural Land Tax: tax justice and environmental incentives

instituto Escolhas



RURAL LAND TAX: TAX JUSTICE AND ENVIRONMENTAL INCENTIVES

Study designed by Instituto Escolhas

Coordination: **Jaqueline Ferreira, Sergio Leitão** & **Natalia Nunes Ferreira Batista** (Instituto Escolhas)
Technical implementation:
Bernard Appy
Carlos Mares
Team GeoLab/GPP (USP/Esalq) & Entropix Engenharia:
Alberto Barretto, Arthur Nicolaus Fendrich, Carlos Mário Guedes de Guedes, Gerd Sparovek, Rodrigo Fernando Maule, Roger Augusto de Camargo, Sergio Paganini Martins.

Instituto Escolhas

São Paulo, April 2019.

Instituto Escolhas develops studies and analyzes on the economy and the environment to achieve sustainable development.

1. PRESENTATION

The aim of this study is proposing the updating of the parameters for the collection of the Tax on Rural Property (ITR in Portuguese). In addition to the tax revenues that generates the ITR intended to be a means of regulating, in that establishing progressive rates according to the degree of productive use of the property. So it discourages maintaining unproductive properties while attending an extra fiscal purpose.

Unlike the Territorial Urban Property Tax (IPTU in Portuguese), which provide an significant source of funds for municipalities, the collection of the ITR is negligible, although there are more than 5 million rural properties in the country. In 2018, the ITR levied only R$ 1.5 billion – less than 0.1% of the Union tax revenue, which corresponds to a payment of around R$ 3.00 per hectare of the total area. In the equivalent period, the São Paulo City's IPTU alone generated a revenue of R$ 9.94 billion.

In a system that seeks tax justice, the ITR should be as important as the IPTU, since both focus on private property, which can generate income to the owner and whose economic value is benefited by local policies that improve the conditions of collective infrastructure (such as streets, roads, communications, electricity etc.).

In its current model, the ITR fails in all dimensions for which it was designed. It is irrelevant as collecting tool and clearly ineffective in its extra fiscal goals of inducing productive occupation of the land. To make matters worse, there is a clear inconsistency between the rules of the ITR and environmental legislation.

THE MAIN CAUSES TO THIS ARE:

The Livestock Capacity Table, which sets minimum levels of activity productivity, one of the collection bases of the ITR, is not updated since 1980;

The ITR is collected based on the concept of the value of the bare land (VTN), which is self-declared by the landowner and often depreciated, rather than being paid based on the market price of the land.

To account for the above mentioned problems, the study proposes improvements in tax collection parameters that will turn its collection more efficient, as well as make it more compatible with the environmental legislation.

Simulations of the impact of the changes proposed by the study show the considerable potential we have to recover the tax collection capacity of the ITR.

It is important to remember that agribusiness is one of the most significant sectors of our economy, accounting for 23% of the GDP in 2017, according to the National Confederation of Agriculture (CNA). Recent data from the Ministry of Agriculture show that the Brazilian agricultural product reported a four-fold increase between 1975 and 2016, which certainly contributed to the increase of land prices of 308% between 2002 and 2013[1].

UPDATING THE PARAMETERS FOR THE COLLECTION OF ITR CAN BE A SIGNIFICANT CONTRIBUTION TO BRAZIL TO PUT THEIR ACCOUNTS STRAIGHT.

The values that can be collected trough the update the ITR demonstrate, beyond the matter of tax justice, that their correct collection offers considerable potential to contribute to the fiscal effort necessary for Brazil to put their accounts straight. It is substantial to note that at least 50% of the ITR revenue is allocated to the municipalities where the property is. When the municipality obtains an agreement with the Internal Revenue Service and becomes responsible for collection and control, the amount is as high as 100%.

Designed and coordinated by Instituto Escolhas, the study was conducted by researchers from the Laboratório de Planejamento de Uso do Solo e Conservação (Use Planning Laboratory and Conservation) (GeoLab) and of the Grupo de Políticas Públicas (Public Policy Group) (PPG), both of ESALQ/USP, by the economist Bernard Appy and the lawyer Carlos Mares.

[1] AGROANALYSIS (2014). Agroanalysis: FGV agribusiness magazine, vol. 34, # 12, December.

2. PROPOSALS

1

Update the Livestock Capacity Table to an average of 1.37 livestock units per hectare, nearly two and half times larger than the number used today, which is 0.56 per hectare.

2

New formula for tax basis to replace the current tax rates table:

(i) starts from a minimum fixed rate (0.2%), which reinforces the role of the ITR as wealth tribute, as the IPTU, levied (albeit at a reduced rate) on the entire real estate market value, except areas of mandatory environmental preservation;

(ii) It is progressive and eliminates jumps between the tracks of the current table, which may be causing distortions in the framework of real estate;

(iii) makes progressive the tax rate only with respect to the usable area, and not to the total area of the property (including protected areas), which is a distortion of the current model.

3

Replacement, in the ITR calculation base, of the Bare Land Value (VTN) by the Rural Property Value (VIR), which represent the regional average value of the property market as a whole, including improvements, cultures, etc. ITR being a tax on real estate assets, there is no reason that does not relate to the entire property value, including investments in it, like the collection of property tax model;

4

Creation of punitive measures for non-compliance with environmental legislation. In the case of real estate not registered in the Rural Environmental Registry (CAR in Portuguese), or whose owners violate the provisions of the Forest Code, the areas of mandatory preservation may not be deducted from taxable area for calculation purposes of the calculation basis and should be considered as unused area for the purpose of setting rate;

5

Changing the concept of small rural properties, which are immune to the incidence of ITR for taxable property with area up to 24 hectares. Instead of considering the total area of the property to define the concept (current legislation), the proposal takes into account only the tax area, which better reflects the potential for economic exploitation of the property;

6

End of exemption to properties with area less than 1,000, 500 or 200 ha (Depending on the region), the application of the minimum rates of livestock stocking.

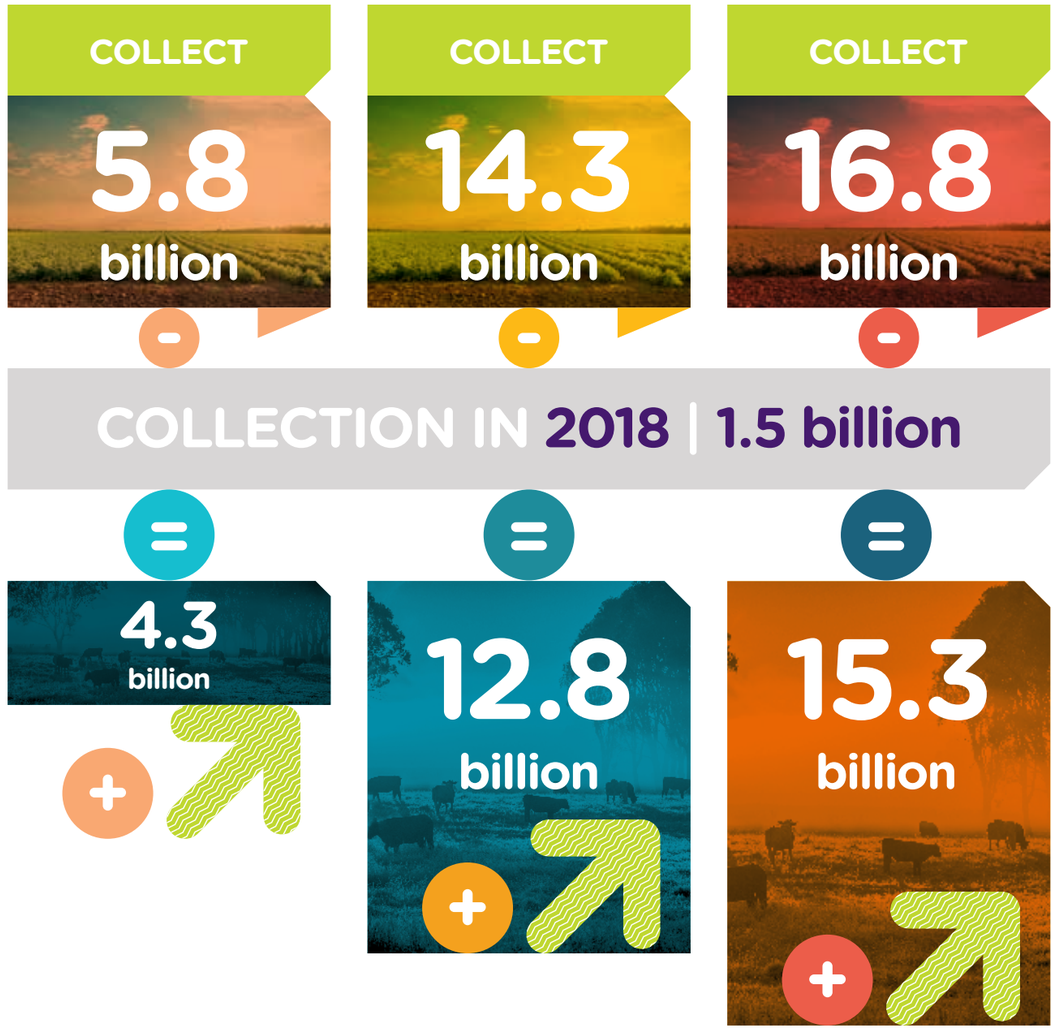
The above proposals were modeled in a spatial database of land use in Brazil from which it was possible to simulate the tax collection scenarios and compare the results with what is currently collected. The resulting draft bill of the above changes can be seen in the full study report, in Instituto Escolhas website.

3. MAIN RESULTS

The country may raise **5.8 billion** using the market value of land for the collection of the ITR, while keeping the current legislation. This value is R$ 4.3 billion higher than the tax collected in 2018, which was R$ 1.5 billion;

The country may raise **R$ 14.3 billion** using the value of the land market and the adoption of a new table of Livestock Capacity. This value is R$ 12.8 billion higher than the tax collected in 2018;

The country may raise **R$ 16.8 billion** with the two previous changes and adopting the new proposed formula for calculating the ITR. This value is R$ 15.3 billion higher than the tax collected in 2018.

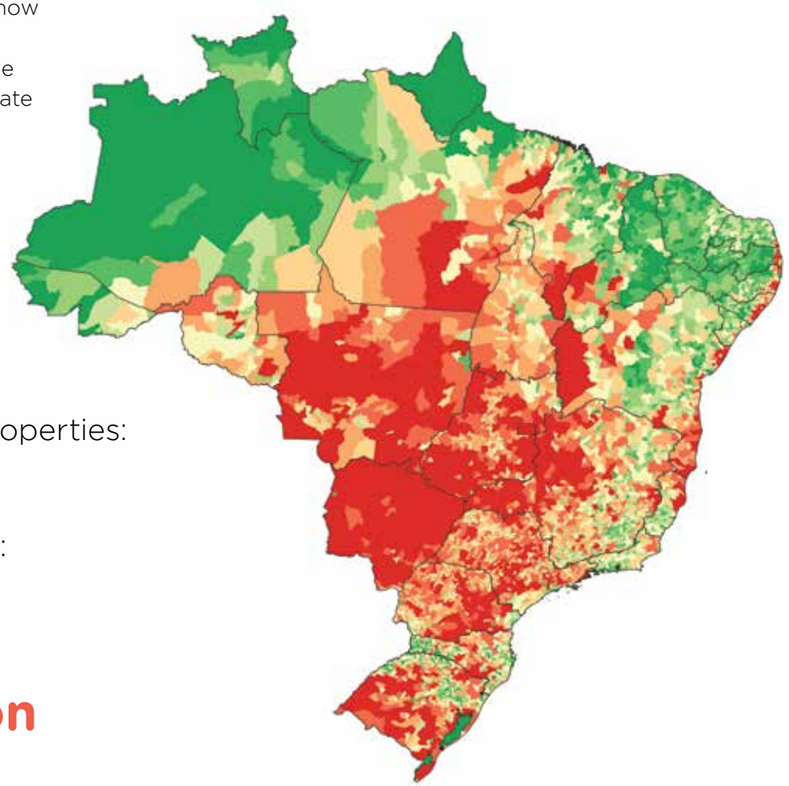


4. SCENARIOS

SCENARIO A - BASELINE SCENARIO

This scenario shows the full implementation of the currently applicable law. In this case, no change is proposed, but it is assumed that there is no coming effect of the self-declaration, since all the variables involved are charged through geoprocessing or from public data sources and the most disaggregated level possible: rural property[2]. The value of the bare land (VTN) here, for example, uses the land market prices base from the IEG/FNP[3].

The results of this scenario show that self-declaration by the base information owner to the collection of taxes can generate considerable differences between the effective and potential revenues.



Result

Number of paying properties:

1,582,465

Taxable tax area (ha):

177,085,772

Expected collection:

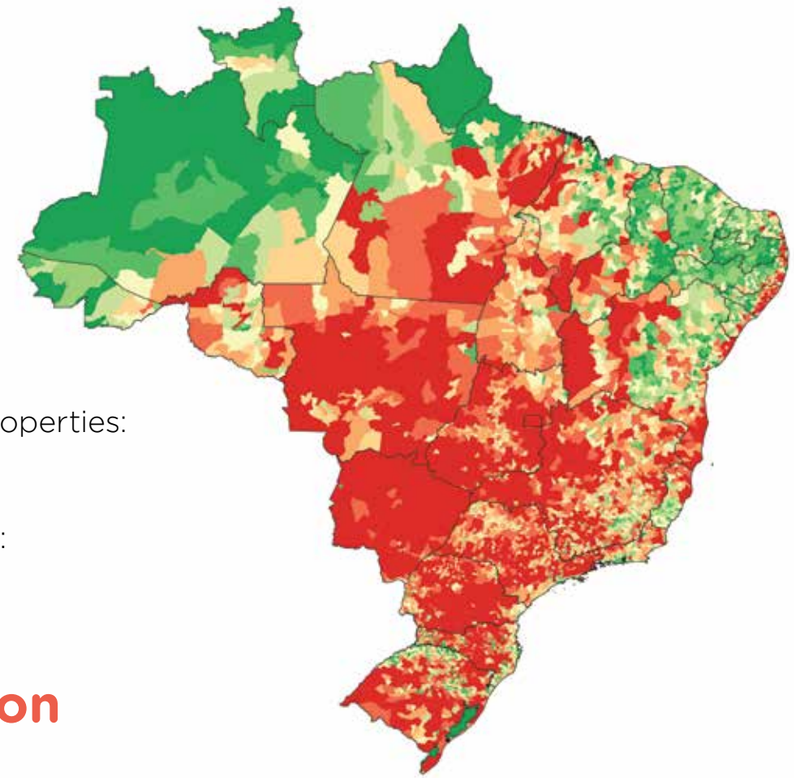
R$ 5.8 billion

[2] Are modeling sources: agricultural suitability map Geolab - USP/ESALQ, land mesh of the Agriculture Atlas, land market values of the IEG/FNP and data from IBGE municipal livestock production. Metodology available in the full report in the Instituto Escolhas website.

[3] **Informa Economics IEG | FNP** is a consultancy for agricultural commodities and livestock **Grupo Informa Plc**. in Brazil, in the last 15 years held bimonthly collection of land market data distributed in 133 homogeneous regions.

SCENARIO B - UPDATE OF THE LIVESTOCK CAPACITY TABLE

From the result of scenario A, we simulated the effect of updating the Livestock Capacity table, the average value of units per hectare jumps from 0.56 to 1.37 in the current table, the results show that the averages of the South and Northeast regions had the most significant increase of the country's livestock productivity[4].



Result

Number of paying properties:

1,582,465

Taxable tax area (ha):

177,085,772

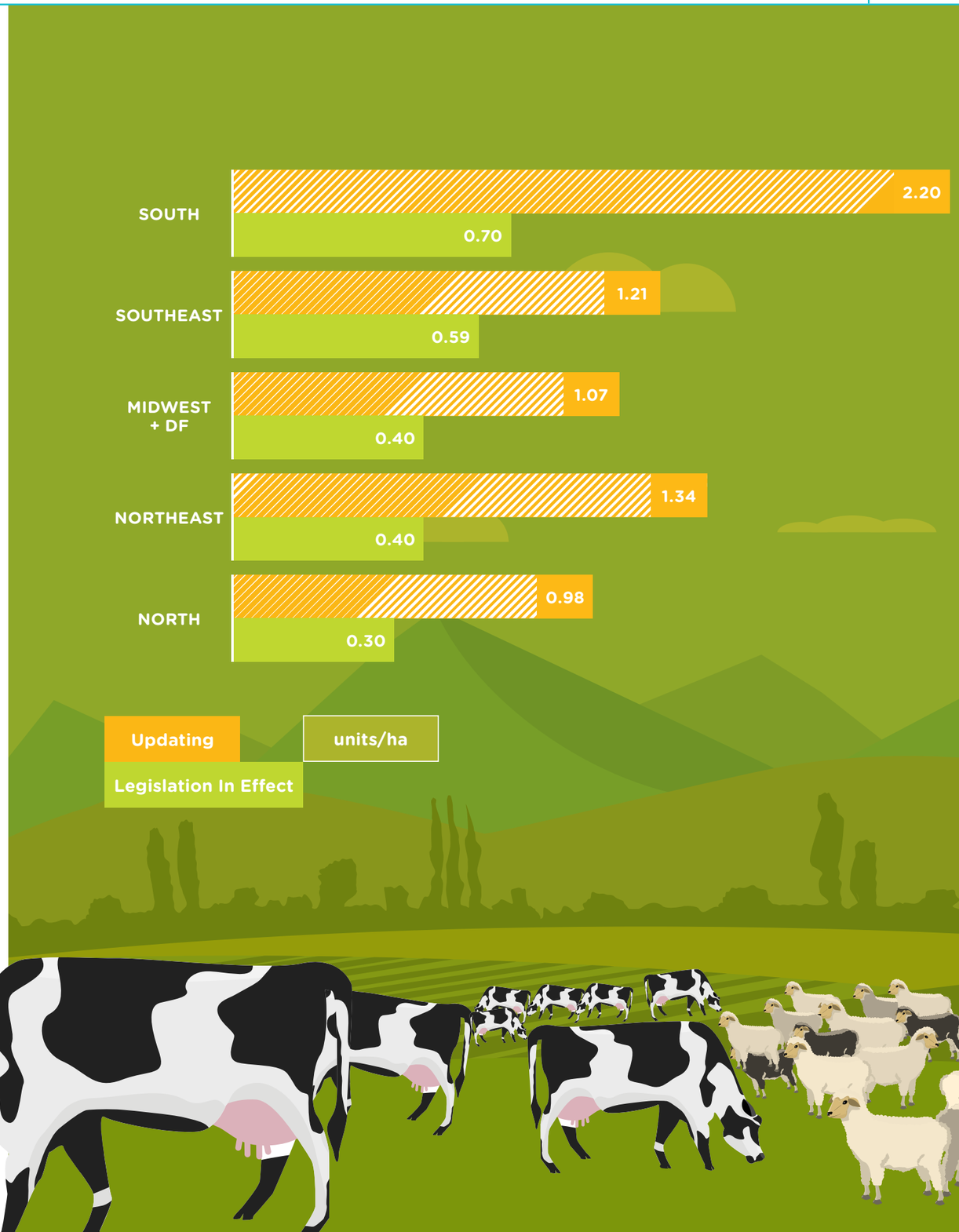
Expected collection:

R$ 14.3 billion

[4] The study did not calculate rates of productivity in agriculture. However, the bill proposed by this study, defines a period of three years to the competent bodies of administration get an agricultural productivity index.

LIVESTOCK CAPACITY TABLE - BRAZIL

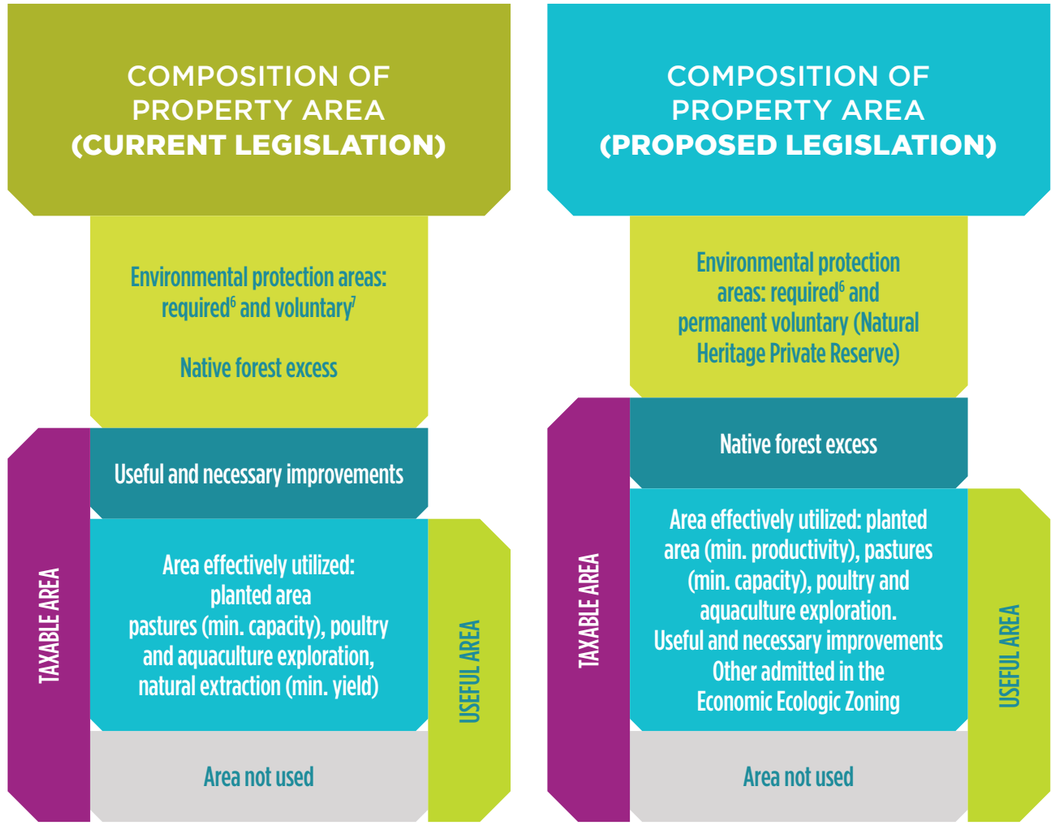
	Minimum value (units/ha)	Average value (units/ha)	Maximum value (units/ha)
Current Law*	0.15	0.56	0.90
Update**	0.62	1.37	4.09



SCENARIO C - NEW CALCULATION FORMULA FOR THE ITR AND OTHER LEGAL CHANGES

From scenario B, we simulate the effect of changing the formula for calculating the ITR, the concepts of incidence areas of tax (taxable area, usable area, effectively used area) and other changes in legislation[5].

TAX INCIDENCE AREAS



[5] See "Proposals", item 2 of this summary.
[6] Permanent Protection Area (APP in Portuguese) and Legal Reserve (RL in Portuguese) are examples of required environmental protection areas.
[7] Natural Heritage Private Reserve (RPPN in Portuguese) and environmental servitude are examples of voluntary environmental protection areas.

NEW FORMULA

ITR = calculation base * rate

$$\text{Tax Base} = \text{VIR} * \left(\frac{At}{AT}\right)$$

AA = useful area

VIR = rural property value

AT = total area

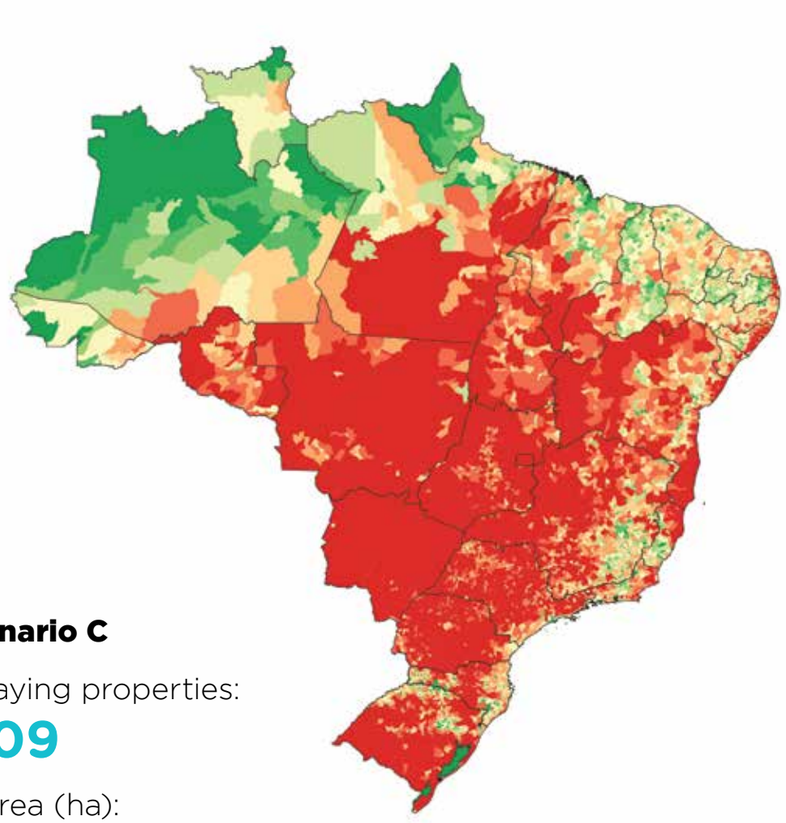
$$\text{Rate} = 0.2\% + \frac{AA}{At} * \left(0.025\% * \frac{\text{Min}\,(1000; AA)}{50} + 3\% * (1 - GU)\right)$$

At = taxable area

GU (degree of utilization) = ratio between the area effectively used and the usable area

The proposed formula for the rate consists of three components.
The **first** is a fixed component of 0.2% imposed on the entire base. The other components are proportional to the ratio of the usable area and the tax area.
The **second** component indicates that the progressive rate is a function of the usable area of the property. For example, it will be 0.05% for a property with usable area 100 ha and 0.5% for a property with a usable area of 1,000 hectares or more.
The **third** component indicates that the rate is inversely proportional to the degree of utilization (productivity indicator in the property holding). Thus, if a property fully meets the minimum requirements of productivity (GU = 1), this component of the rate will be zero. Once the degree of utilization is 60% (GU = 0,6), this component will be the rate of 1.2%.

The scenario does not include changing the VTN to VIR because there is no public database available with rural property value prices (VIR). The price data of the land, coming from IEG/FNP reflect the market value of the bare land. Accordingly, the amount to be collected with the changes proposed can be still higher than the results presented below.



Results - scenario C

Number of paying properties:

1,758,409

Taxable tax area (ha):

255,764,196

Expected collection:

R$ 16.8 billion

Total collection (R$)

- up to 10 thousand
- from 10 to 40 thousand
- from 40 to 80 thousand
- from 80 to 160 thousand
- from 160 to 320 thousand
- from 320 to 640 thousand
- from 640 to 1.28 mi
- from 1.28 to 2.56 mi
- over 2.56 mi

See the full study at: **http://escolhas.org/biblioteca/estudos-instituto-escolhas/**

Editorial Prefix: 94334
ISBN: 978-85-94334-04-6
Title: Rural Land Tax: tax justice and environmental incentives
Support Type: digital

Organization: **Instituto Escolhas Editorial**
Coordination: **Jaqueline Ferreira, Natália Nunes Ferreira Batista** & **Sergio Leitão**
Text Editing: **Aline Cristina C. Souza, Jaqueline Ferreira** & **Sergio Leitão**
Art Edition: **Brazz Design**
Printing: **Coppola**
Cover Photo: **Budimir Jevtic**

Rua Dr. Virgílio de Carvalho Pinto, 445
Sala 11 - Pinheiros - São Paulo

www.escolhas.org

Follow Instituto Escolhas

@_escolhas

instituto Escolhas

www.escolhas.org