CHARACTERIZATION OF AQUACULTURE PRODUCTION IN TOCANTINS STATE, BRAZIL

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In Brazil, aquaculture production reached 415,000 t in 2009, accounting a growth of 43.8% when compared to production in 2003. Despite having of 68% of the country superficial waters, the Brazilian north region has the smaller aquaculture production in the country, represented by fish culture only. Tocantins state is the third largest producer of this region, with a production of 7,542.5 t in 2009 (IBAMA, 2007 and MPA, 2010).

The fish culture in Tocantins state grew 54% from 2004 to 2009 (MPA, 2010). The number of producers who develop the phases of fish growth in their respective areas of production are still not well documented. Nevertheless, the entire commodity chain in aquaculture, from reproduction, passing by growth until processing, already exists in this state, but at different technological levels. In order to make this research possible, we visited fish cultures aiming to characterize their production system particularities in Tocantins state. Geographically, producers are distributed in all regions, with major concentration in the southeast region of the state. The production system applied in fish cultures is, in general, semi intensive in dams and ponds. An impressive system is the fish production in dams with different sizes provided with accumulated rainfall water. These dams usually have larger areas and profound when compared to ordinary ponds, because in Tocantins, rainfall period is from October to April. In the following months dams do not receive rain water and also loses it by evaporation. Under these conditions, polyculture production system predominates due its efficiency in diversifying fish production. Species usually cultivated are the "Tambaqui" *Colossoma macropomum*, the "Pirapitinga" *Piaractus brachypomus* and/or their hybrids, together with "Matrinxã" *Brycon amazonicus*, "Piau" *Leporinus macrocephalus* and "Curimatã" *Prochilodus sp*. Man workforce was considered a barrier to this activity in most farms visited. Alternative production systems, such as cages are still not well established in Tocantins, but introductory investments are being given to do so. There are perspectives to increase this production system, once the state possesses big lakes from hydroelectric power plants, totaling 1,028 km^2. One of these lakes, the Lageado Lake, has 630 km^2 and there are underground studies to defining its technical viability to allow the aquaculture implementation. Thus, it is expected that technical advances in cages production together with improved traditional fish culture practices will enlarge Tocantins potential for this activity. Moreover, it is necessary to develop more researches allied with technical transfer to producers.

References:

Instituto Brasileiro de Meio Ambiente (IBAMA). Estatística da Pesca 2007. Brasília, 2007.
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Table 1 - Species produced and revenue in Tocantins State.

Specie	Production (t)	USD (Million)
Tambaqui	1,950.0	3,147
Caranha	1,425.0	7,772
Piau	500.0	0,882
Hybrid Tambatinga	200.0	0,529
Hybrid Tambacu	200.0	0,529
Others	183.0	0,430

Source: IBAMA 2007, USD – average nov/2010