

## Living and Working with Peasants: Learning about Sustainability and Agricultural Systems Starting from the University

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### Presentation

With this paper we expect to debate the major of the training of **development agents** under the conception of resources` sustainability and agricultural systems. We will report the experience of Santa Catarina Federal University-Agronomy Collage (Florianopolis-Santa Catarina-Brazil) which, with the peasants participation, have shown the real possibility of changing the traditional training possible after many discussions with pleasant, student and teachers, and mainly after years of matching this new experience in the field.

### **Agriculture: change of technical base and its influence in the Research, Extension and Agricultural Education**

The transformation on the technical base of agriculture, through the introduction of **Green Revolution** patterns in the fifties, brings a new dimension to Research, Extension and Agricultural Education Systems, beyond known economical, social and environmental consequences (PEARCE, 1980; CHONCHOL, 1986; DELGADO, 1985; KAGEYAMA and SILVA, 1989). This model postulates the use of **high productivity varieties** (and animal species) and a correspondent **technical package** (seeds, fertilizers, chemicals, irrigation, mechanization, etc). The green Revolution model no doubt gave to agriculture a new energy, by its integration with the industrial sector. The increase of physical productivity expresses significant economic and technical transformations to a specific parcel of the agricultural sector, and to the industrial, commercial and financial sectors. On the other hand, there are serious consequences for the peasant sector especially, besides representing a violent environmental aggression.

The great contradiction between the technical progress reached by “modern agriculture”, and how this model was reflected in an important sector (represented by family agriculture, peasants, rural workers and landless rural workers) was evident. The technical progress was followed by equivalent social transformations. While we can verify a big technological advancement, it is possible to perceive a notable social regression (CHONCHOL, 1983). The model showed its exclusive and degrading character, giving priority to the “dynamic agriculture” (directed to exportation and industrialization) based on monocultural “plantations” and with high use of chemical inputs and mechanization. This scientific development received the full help from the State, which organized its policies and institutions to support the demands of the hegemonic sectors.

The enormous change in the scientific and technological policy of agricultural modernization expresses a necessity of linkage between the Research (generation and adaptation of technology), the Extension (diffusion of packages), the financial sector (financing the new technology and opening market areas to industries), and the University (forming and training researchers and extension agents to reproduce the model).

### **Professional Training: To reproduce or To Transform?**

As a result of the described scientific and technological policy the reproduction of the model was imposed on professional training; the teaching of agricultural packages of “modern technologies”. Also, a partial view of rural reality was imposed (omitting the peasant characteristics and their social and economic role; the biological diversity; the environment; the food, local alternatives, etc), through the adoption of methodologies and pedagogical behaviour that express centralization and domination, in a relationship between Research/Extension (macro level), teacher/student and expert/farmer (micro level).

The consequences in the general development and in the didactic-pedagogical relations were so big, in a way that the “dominated” people have a tendency to keep themselves away from their “dominators”. If in an educator-pupil relationship an authentic dialogue does not exist, then they cause the negation of the joint discovery and the educational exploration which predominate. The result is the transfer (to students and/or experts) the responsibility “to absorb” (without criticism) the taught subject matter, and to transfer it as a “recipe”. This “reproduction process” has several consequences in the development agents’ training. These consequences have influences and define new professional references that present some characteristics to which we give special attention:

- Isolation of reality (“forgetting” the peasant sector),
- The conception of agriculture, based on productivity, and the consideration of the farmer like a “production factor” only,
- Mystic to “technological modernization”,
- Disregard for the rural people’s knowledge, how the peasants think and what they aspire to,
- Vertical conception of education (educator-pupil relation is reproduced later in an expert-farmer relation),
- Environmental issues and sustainability were not considered, or were unknown.

### **Professional Training...Living the Reality**

We should start with the understanding that the training model we are referring to has reached a crisis point. That is to say, it is not able to let development agents give answers to main problems of the society (from the social, human, cultural, political, ambiental and technical-economic points of the view). We mean answers of a creative, participative and, primarily, effective nature. Therefore, we have to put forward a question: How can this general “scenery” be changed?

In the first attempt to answer this question, it is made clear that the searching goes beyond and curricular organisation and subject programs (even if it will necessary go cross them).

This searching depends on an effective engagement with the majority of the population in rural areas (peasant/family ways of agriculture), and it has to begin by understanding of their forms, ways of thinking and decision making. It is also necessary, in a general context, to understand the contradictions, injustices, real problems and potentialities. In this sense, it is fundamental to demystify the “education/training neutrality”, and to go further than this “ingenuous” vision, up to a critical vision. Another question is to demythologise the “University/Colleges” walls, and to understand that they need to incorporate society and be incorporated by it (MUSSOI, 1992). Then, the professional training, real and compromised does not take place only in the university physical space, but through the meditation of the concrete problems of the reality. It is essential that we go into the encounter of the reality in a society environment, and bring this debate through the participation of the different sectors (organized or not), with priority to the social majority of the population, into the “teaching space/University.

In this permanent work of apprehension and comprehension of the reality, it is fundamental that the students and teachers in any training process, (to transform the reality), experience together, constantly and directly, the dynamics of the reality that involve them and expect solutions from them. Starting from a reflection about this complex situation, after so many debates, advances and resistance, we have concluded that an effective instrument was necessary to bring the concrete reality into the “formal teaching space” and, from this synthesis-meeting would result a mutual engagement between the University and Society, and with sustainable development.

By understanding that a development agent who is going to contribute to changing the reality, needs to know and understand this reality (in the deepest way possible) beforehand, we thin a way of changing the teaching methodology that searches for a regular (and curricular) way to increase the contact of the students (and teachers) with a rural area/family agriculture is necessary. This kind of “researching and teaching” methodology would be organised and simulated in a manner that the students (and teachers) experienced themselves and all together the peasant and rural reality, for periods that would make the apprehension and comprehension of it possible. In this kind of experience, the students under the teacher supervision and monitoring orientation, should live (and work) together with the peasants, rural workers, social movements, etc. in their communities. Thus living daily lives (to perceive and analyse its problematic- conditional factors and results- and potentialities). Later on, the problems and potentialities should be transferred into the “classroom”. In these terms, students, teachers, the courses/subjects/programs/curriculum, the own “classes”, have a tendency to, gradually, “take a shower” of reality. This would contribute to the improvement of the professional training process and, consequently, amplify the democratic professionalization of education (although not directly in the beginning).

Then, an obligatory subject was created, which, in the intermediate phase of the course (4th phase in 10, in Agronomy Course), made possible a stay period of the students in rural communities, living and working with peasants and theirs families. This subject (which we call “living stay”), has in its basic conception the expectation to provide the student a direct contact with the families and their realities for 30 days (450 hours as the minimum). The main objective is the student, living/residing and working with the peasants and theirs families, and living their day to day (and at all hours of the day) lives. Also, to evaluate the factors that have influence in their decisions (decision logic), their organization conceptions, forms of production, work habits, knowledge (and use of knowledge), behaviour, work

division, environment relationship, family relations, culture, religion, use of leisure, etc (MUSSOI and OLIVEIRA, 1979). It would be ingenuous to suppose that thirty days would be time enough to research this ambitious objective. Meanwhile, we can advance that the practice has shown that the student/professional acquire a more human and less technocratic vision of its relationships with rural families, and they get a better understanding of the complex variables, activities and compositions that interfere with the familiar agricultural decisions.

In addition to the results described up till now, it was expected (and the practice confirmed it gradually) that, with the return of the students, a new pedagogical would start in the School/University. This is the result of the “confrontation” between what is being taught and the concrete and perceived reality. This situation also makes a gradual program and curricular adaptations possible, and even an interdisciplinary integration. The general characteristics of this experience are the followings:

- time- it is carried out in the semester (2- year of Agronomy Course- in the transition from “basic” to “specialization-applied” subjects),
- specific characteristics- to live and work in a peasant community (living in a family peasant home),
- stages-
- debate of the general proposal with peasants and their families, and their basic organizations,
- selection of the peasant who will receive the students (searching the average type in the region)- this phase is carried out by the peasants’ basic organizations,
- visit and “preparation” of the farmers,
- preparation of the students and teachers (social, professional and general behaviour),
- the living stay- 30 days,
- monitoring by teachers (once each 15 days),
- evolution seminar with participation of the peasants families, students, teachers. In this time, the farmers visit the University (laboratories, experimental fields, departments, etc), debating its functions and giving suggestions.

It is usual after this, that the farmers be invited to come back and give dissertations and participate in the seminars in several subjects (mainly in the field of Rural Development). Observations: the costs (students, teachers and families of the farmers travels) are paid by the University. The costs of the students stay in a peasant farm are covered by the farmer (in charge of students “labour”).

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