

Gender Aspects in Tropical Agriculture
-
**a qualitative case study in the forest margin zone of
Central Sulawesi, Indonesia**

Franziska Woellert, Martin Noltze & Heiko Faust

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**SFB 552, Georg-August-Universität Göttingen,
Büsgenweg 1, 37077 Göttingen**

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Summary

Differing negotiation positions and specific knowledge of gender at village and household levels form the basic question of this paper. The paper deals with differences between gender which influence the access to agricultural land. Gender-research does not see households as unitary models in which all actions and effects in the household affect all members equally. Instead women and men act and react in highly differing ways according to their respective gender-roles. It has been recognised in international development cooperation that men and women undertake differing tasks in agricultural production. While men mainly concentrate on growing cash crops, women take an important role in the production of subsistence crops for their own use. In the course of this research we used the methods of participatory observation, group discussion, creation of matrices for comparison of gender-specific rights and responsibilities and participatory mapping. It emerged, that the results vary primarily according to the type of crop rather than between the villages. While women have a traditional role in rice cultivation, men have a dominant role with the cash crop cacao.

Cacao production, which has only recently been introduced as a cash crop, has caused a slight dominance of men. However both gender in Toro feel equally responsible for work in the fields and normally take land use decisions together. In Bulili a male dominance is noticeable in the preponderant cacao production. Despite this the role of women in land use decisions is not to be underestimated. Although the women are less integrated in work on the fields, they still have deep knowledge of agricultural techniques.

Important land use decisions are reached jointly in families although this varies strongly from family to family. This finding is important for the stabilisation of rainforest zones. In order to influence the people in this region toward protection of forest margins, it is decisive to also involve the women. Otherwise there is a danger of disturbing the balance of the gender positions inside the families. The results of the analyses of gender roles and gender-consciousness reinforce previous statements. The responsibility of the women is seen mainly in the private intra-family area, while that of men is mainly in the public area. The mutual respect between the marriage partners and for their respective field of responsibility plays an important role. In respect to agriculture there is an allocation of different tasks, but in the control of land resources both gender have an equal say.

1. Introduction

The protection of tropical rainforests counts as one of the most important global challenges. Frequently this protection conflicts with the (agricultural) needs of the people living in tropical regions. Because of this, it is an important goal for the future to find and successfully implement ecological and economic sustainable cultivation systems. Therefore it is important to understand the dynamics behind land use change. This includes the impacts on households, just as the possibilities of these households to exercise influence. Many studies have dealt with these topics, although they define "household" as a single entity without taking the different people involved into consideration. A closer look at the definition of "household = those who dwell under the same roof" reveals that it is composed of different individuals. Depending on age, gender or other characteristics these individuals have a wide and differentiating scope of action, different duties and responsibilities and follow different interests. The result is that the people composing a household have individual bargaining positions.

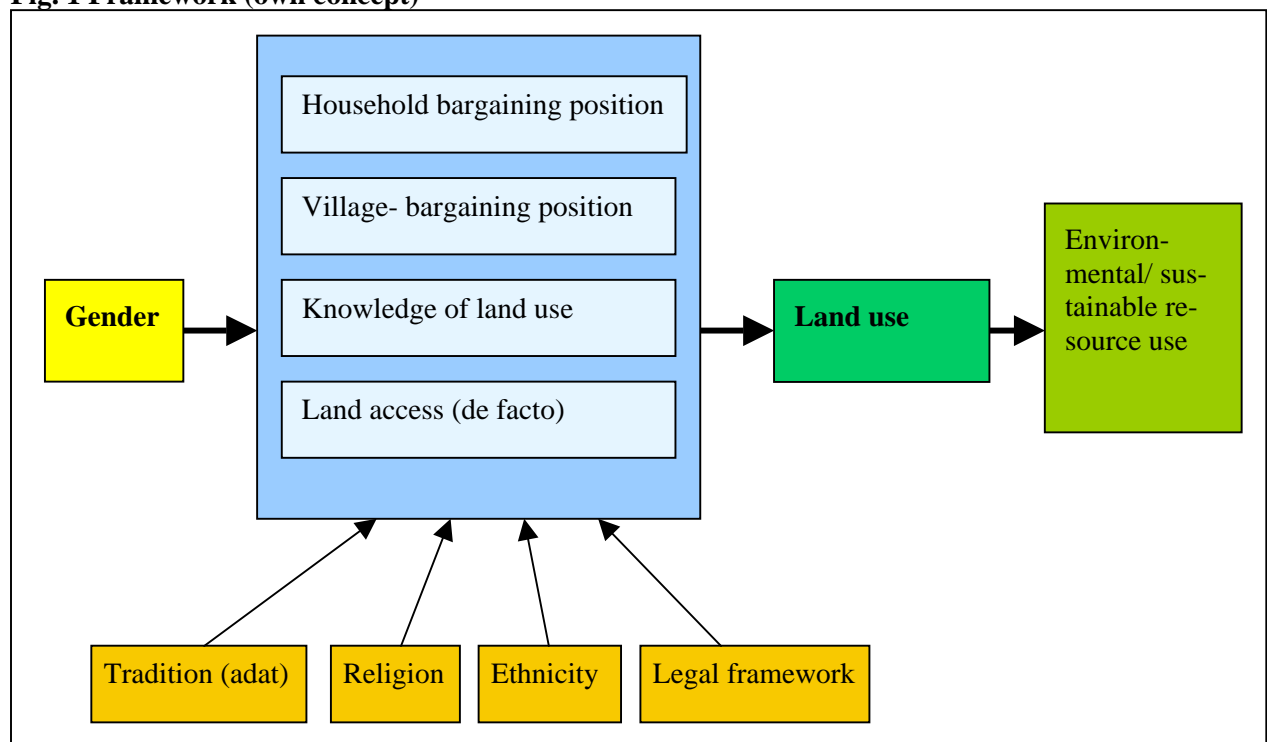
This paper examines the gender specific effects on land use decisions in the two sample villages of Toro and Bulili, situated in the Region of Lore-Lindu national park, Central Sulawesi, Indonesia. For this purpose the outlining, comparison and analyses of typical gender-roles at village- and household level in addition to gender-specifics in connection with agricultural activity and knowledge will be made. The method used is based on gender-analyses. The re-

search project is part of the DFG-special research field 552 “Stability of Rainforest Margins in Indonesia“(STORMA)¹.

The starting basis of this paper is the assumption that belonging to a different gender can impact various factors of the socio-cultural and economic surroundings of an individual. Hence, this study analyses the gender specific similarities and differences of these aspects of the life of the people living in the villages Toro and Bulili. The focus hereby lies on the research of gender-specific influences on land use decisions.

A study of the differing negotiation positions and specific knowledge of gender at village and household levels forms the basic question of this paper. Further, whether there are differences between gender which influence the access to agricultural land. On the basis of the research of these aspects the gender-specific possibilities for land use shall be analysed whereby the influence of gender in questions of sustainable resource use can be clarified. Apart from gender other aspects influence the factors being researched here, such as traditional and religious customs, ethnicity and laws. The following diagram helps to clarify these complex relationships:

Fig. 1 Framework (own concept)



According to the principles of gender analyses the research will be carried out from male and female perspectives. However due to the marginalisation of female-specific problems in scientific discourse it is unavoidable that female roles will be given more attention. Male perspectives will be brought in as supplement and for comparison. For better operationalisation of the empirical work the analyses focuses on four specific factors. These four factors refer to:

1. the participation of men and women in decision making processes on village level

¹ STORMA (Stability of Rainforest Margins in Indonesia) is funded by the German Research Community (DFG) as a collective research program between the Universities of Göttingen, Kassel (Germany), Palu (Central Sulawesi, Indonesia) and IPB Bogor (Indonesia). Since the year 2000 various scientists from these institutions are working interdisciplinary on questions regarding the processes of stabilisation and destabilisation in the Lore-Lindu National Park, Central Sulawesi. (www.storma.de)

2. the participation of men and women in decision making processes on household level
3. the influence of men and women on land use
4. gender-roles and gender-consciousness

The first three points deal with gender relationships, that is the rights and duties of men and women; the fourth level deals with gender-roles, that is the social definition of men and women in village life (see also FAO 2005: 23).

The selection of the villages to be researched was conducted in consideration of existing studies in STORMA. The villages allow an expectation of the widest possible spectrum of results due to their differing social and demographic development. While Toro shows a stable traditional structure, the young migrant-village Bulili is seen as socio-economically dynamic.² Apart from the migration aspect the villages differ in their ethnic and religious composition. A further differentiation of the analyses comes through the consideration of food- and cash crop products³, which allows a link to characteristic gender-roles.

2. Gender and Development

2.2. Definition of Gender

Gender-studies deal with research questions from both male and female perspectives in order to overcome the one sided view of female-studies, towards comprehensive findings relative to both sexes. This is an interdisciplinary approach which brings together gender-aspects from differing fields and introduces gender as a new category of social differentiation.

„Gender“ is a key-term in the research within the field of gender studies and means the cultural and social defined attributes of the sexes, while „sex“ refers the biological characteristics (KERSTAN 1995:31). Gender is not taken as a definitive attribute of a person, but it can be altered by social interaction. Two levels of meaning can be differentiated: The general meaning of male and female images is influenced by state ideology, religion, literature, myths and rituals. The specific level, which exists in parallel, arises from the gender-roles in social reality (SAPTARI 2000:14). Gender studies go beyond the assumption of two distinct gender in society and try to analyse the differentiated sub-categories between the extreme masculine and feminine. Various masculine and feminine categories can be specified according to ethnic, social and religious aspects. Consequently this leads to the division of gender into as many sub-categories as there are individuals (ANDAYA 2000: 27ff.).

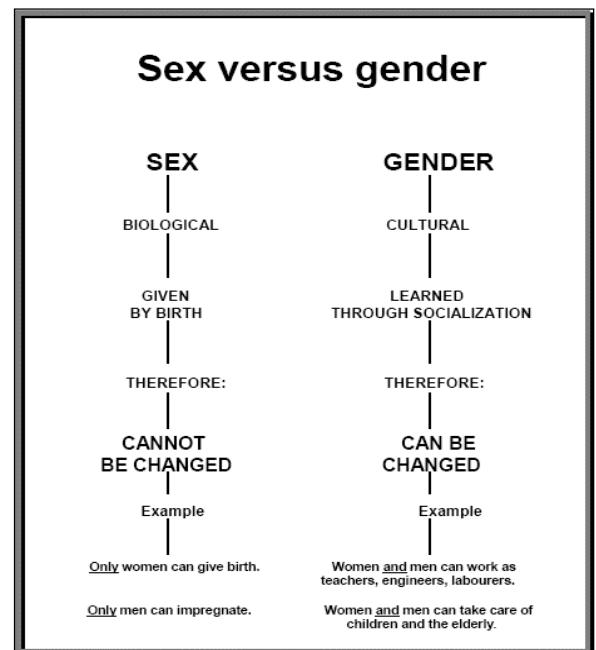


Fig.2 Difference between sex and gender
(KERSTAN 1995:31)

² The 2. phase of STORMA concentrated on the three villages Toro, Bulili (Nopu) and Lempelero. Here a complete census has taken place in 2004, as well as further research in the field of human-environmental-relationships (SCHIPPERS et al. 2008, WEBER et al. 2007, WEBER u. FAUST 2006).

³ The villages of the sample region mainly live of agriculture. Main crops are wet rice and cocoa. In contrast to wet-rice, cocoa is mainly a cash crop. While rice is the main crop in Toro, cocoa is dominant in Bulili.

2.3. Approaches to Gender Studies

Gender-specific approaches are relatively new in development theories. Ester Boserup's „*Women's Role in Economic Development*“ (1970) first showed the relationship between women and development and triggered further theories (MANION 2002:2, SWEETMAN 1999:3). As a new concept the *Women-In-Development-Approach* (WID) encourages women in the sense of emancipation to take a stronger role in economic production processes. Since the end of the 1970s the productive as also the reproductive role of women has been emphasised. The UN-Conference on women and development in Mexico in 1975 emphasises the general role of women in the development processes and developed the *Women-And-Development-Approach* (WAD). However both these approaches were criticised as leading to a double burden on women. Also they could not break down social and political power structures. WID and WAD stood under suspicion of representing an Eurocentric point of view, seeing women as a homogenous group in which social class, ethnic grouping, religion or nationality do not play a part. Because of this it was attempted in the 1980s to look at gender specific power structures as well as recognising the productive and reproductive roles of women. The *Gender-And-Development-Theory* (GAD) was developed, which is directed not at specific women's themes, but at the relationships between the gender in connection with questions of development.

The *Women-Environment-and-Development-Approach* (WED) and the *Gender-Environment-and-Development-Approach* (GED) in parallel recognised the environmental degradation and increasing work load on women. These approaches are based on the realisation that especially women, who generally have the main responsibility for the everyday basic needs of the household, suffer under negative environmental changes such as deforestation, desertification, shortages of drinking water, etc. Practical experience shows, that women are able to manage limited resources more effectively and more sustainably than men. Therefore a targeted improvement of the situation of women and their options for action can lead to a more sustainable use of resources (GÖLER V. RAVENSBURG & JACOBSON 1998:7).

In contrast to the neo-classic and neo-marxist socio-economic analyses, gender-research does not see households as unitary models in which all actions and effects in the household affects all members of the household equally. Instead women and men act and react in highly differing ways according to their respective gender-roles. Development research now follows the household model of *bargaining approaches* (KABEER 1994). This assumes that a household comprises individuals with varying interests and positions of power. Alongside age, education, social standing and financial possibilities, the gender-role is the major definer of position and power of an individual in a household.

2.3. Feminisation of Agriculture

A reason for the increasing female project orientation in development cooperation is the growing importance of female work in agriculture. While more and more men leave the land due to work-migration, wars and warlike processes, women stay in the villages and take over the agricultural work. The FAO thus speaks of a „feminisation of agriculture“ (FAO 1998a, 1998b). On the other hand there is a process of displacement of women from agricultural decision making, because of increasing cultivation of cash-crops, which involves a higher level of technology in agriculture. These processes are often started by external consultancies which mainly focus on the male population. As a result women are excluded from important decision making processes regarding land use.

Furthermore women have little control over the land they use under traditional and state laws. Therefore it is difficult for them to represent their aims and interests regarding land use. According to AGARWAL (1994, 2002) it is access to land which has a positive effect on welfare,

efficiency, equality and empowerment. In this respect one speaks of a necessary feminisation of responsibility (WINTERLICH 1992, in ULBERT 1999:20f), which however can lead to a double or triple burden on women. Additionally changes in economic and social structures through the introduction of new technologies and crops can often lead to a negative change in the life of women (WHITEHEAD 1985:27ff.). It has been recognised in international development cooperation that men and women undertake differing tasks in agricultural production. While men mainly concentrate on growing cash crops, women take an important role in the production of subsistence crops for their own use.

The importance of women in development processes in rural areas is emphasised in the Millennium Development Goals (MDGs) (PEARL 2003). The third point of the MDGs is dedicated exclusively to the promotion and support of women. The seventh point of the MDGs underlines the importance of sustainable resource use for further development. Responsible use of natural resources is vital especially in the fragile ecosystems of the tropics. Understanding the relationships between the ecological and social factors in rainforest margin zones therefore plays an important role in the realisation of development targets.

2.4. Gender Aspects in Indonesia

In general women in South-East Asia enjoy a relatively high status compared with women in South- or East Asia; even if this applies mainly to women in the upper classes (LI 1998:679). In Indonesia women and men have equal rights under the constitution. Indonesia has also ratified the UN-Convention to end all discrimination of women. According to the *Human Development Report* (HDR) of the *United Nations Development Program* (UNDP) from 2006 Indonesia is at place 108 out of a 177 countries investigated on the *Gender Development Index* (GDI). This worldwide equality ranking considers gender-specific values for life expectancy, income and education. Especially in regard to education women are very well placed. In the school year of 2004 approximately the same number of girls as boys attended primary school (*Sekolah Dasar*), while in the lower secondary level (*Sekolah Menengah Pertama*) more girls than boys attended. Also in the upper secondary level the quotient of female to male students was 97%. Only in higher education do the effects of social barriers against women again become clear (UNDP 2006: 363ff.). In public service and in politics women are however under-represented. In 2003 only 38% of civil servants were women, and only 45 of 462 members of parliament were female (UNDP et al. 2004:17f).

In Indonesia there are strong differences in the historically grown gender-images of various ethnic groups, which still today influence society more or less strongly. Differing gender-roles can be observed among the various social classes, in towns and rural areas and also between the central and peripheral islands. Today's image of women in Indonesia is above all influenced by the period of the „new order“ (1967-1998). Since the 1990s the Suharto-government proclaimed a family-ideology, which was tantamount to the domestication of women. A household was characterised by a male household head as representative and bread-winner of the family and the ideal women as housewife and mother. Reality was and is different. Women take a large share of productive work in Indonesia. Especially in rural areas it is usually necessary and natural that women take part in work in the fields. This contributes to the relatively good negotiation positions which women have in their families. For instance there is the tradition in many families that women look after the household finances, and therefore have a certain financial autonomy (LOCHER-SCHOLTEN 2000:34). Also women have equal rights of inheritance and receive half of the family property (LI 1998: 679). A central area of living together in Indonesia is the concept of harmony *musyawarah dan mufakat* (discussion and consensus), which also plays a vital role in modern Indonesian households. Therefore women often subjugate their own interest to harmony.

3. Methods

3.1. Gender Analyses and Participatory Rural Appraisal (PRA)

The research results are based on a quantitative empirical study. For this semi-structured guided interviews, which were developed on the basis of key questions in gender-analyses, were extended by the methods of the *Participatory-Rural-Appraisal* (PRA-) approach. Problem orientated interviews were conducted with men and women on household and village level. Additionally quantitative data out of Sub-section A1 of the SFB 552 of the census taken in the relevant villages were used in the preparation of the research and analyses.

The basis of the gender analyses follows the approach in the above mentioned *Gender-And-Development-Theory*. Hereby the strategic (based on structural causes) and practical (based on difficult living conditions) gender needs of men and women were identified (KERSTAN 1995: 94f.). The central categories of gender analyses remain (cf. KERSTAN 1995:70ff. and ULBERT 1999:38):

- examination of gender-specific division of labour and the division of responsibility for economic and social tasks,
- the concept of gender-roles, which describe the standards and values of the gender,
- the access, that is the possibility of use, and the control, the power of decision over resources,
- the social and political position of the gender,
- and the institutional framework.

These categories were considered in focal points of this analysis and also in the development of the questionnaires. Another methodical tool of gender analyses is the *Participatory Rural Appraisal-Approach*, which is introduced with the following. The core of this research method is the participatory approach. In development cooperation participation is understood on the one hand as a standard and aim, on the other hand as an instrument of implementation of targets (KRÜGER&LOHNERT 1996:44, cit. in ULBERT 1999:15). The sampling method of the *Participatory Rural Appraisal* approach belongs to the „*family of participatory approaches and methods which emphasize local knowledge and enable local people to do their own appraisal, analysis and planning. PRA uses group animation and exercises to facilitate information sharing, analysis and action among stakeholders.*” (WORLD BANK 1995:175, cit. in BROWN et al. 2002:1). According to the PRA-approach, researchers and researchees should work together to reveal important information and better utilise local knowledge (PUTRI 2002: 63, BROWN et al. 2002:2).

During the 1980s and 1990s the concept of participative development and political entitlement of participative methods came to the fore. The people concerned should thereby be empowered to decide for themselves about future projects in their regions and take responsibility for these (Empowerment-Component) (CHAMBER 1992). According to the phase of the project cycle in which PRA-methods are used, the people concerned should influence the analyses of the problem, project planning, implementation and evaluation. The following table compares the applicability of various key-concepts of the PRA-approach in development cooperation with the needs of a scientific study.

Summing up, it is clear that the use of the PRA-approach can be valuable for scientific studies, with a few exceptions. The biggest discrepancy is between the scientific desire for objectivity and the political desire for participation of the involved in the analyses and the evaluation of the results. The use of the PRA-approach can therefore be seen as an extension of (social-) scientific methods. It does however require a special degree of flexibility on the part of

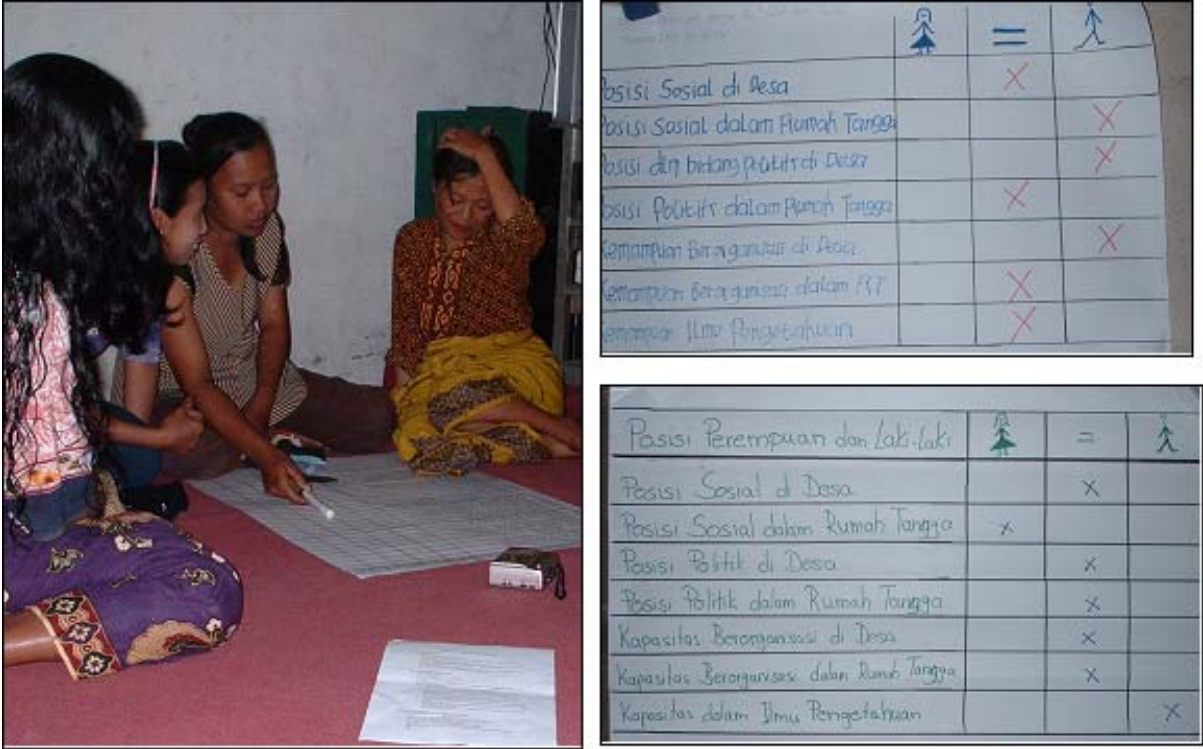
the researcher. The researcher must above all take care not to have contact only with elite groups within the social structure, so as not to further weaken marginalised groups. One of the strengths of the PRA-approach is in the broad range of methods. So with this the fitting technique can be chosen for each research project. In the course of this research we used the methods of participatory observation, group discussion, creation of matrices for comparison of gender-specific rights and responsibilities and *participatory mapping* (Venn-Diagram).

The participatory observation was limited due to a limited time of research available in situ of only two month. This time was largely invested in the two villages under research. Altogether 46 single or small group interviews with men and women were conducted together with 3 group discussions with representatives of local women’s groups. In Toro the invited women were village-quarter representatives of the local women’s-group *Organisasi Perempuan Adat Ngata Toro* (OPANT). In Bulili several women from the group „Islamic women of Al-Khaeraat“ (*Wanita Islam Al-Khaeraat – WIA*) together.

3.2 Positions-matrix

The matrices were used both in the single interviews and the group discussions. In the latter they were filled out by the women in small groups and then discussed in the plenum. They referred on the one hand to matters of land access, ownership and control and in addition to gender-specific responsibilities in household and agriculture. On the other hand the estimation of the political and social position of women and men in household and village levels asked for.

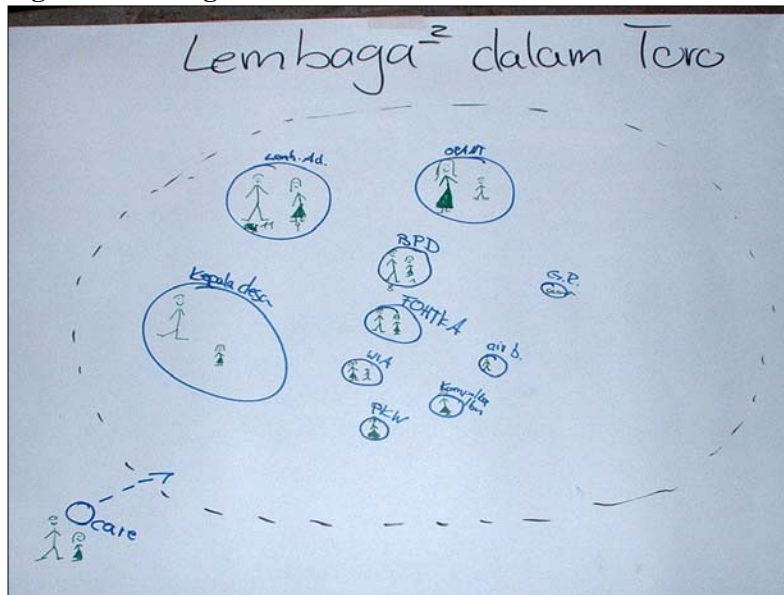
Fig. 3 Women in Toro discussing the position matrices



3.3. Venn-Diagram

The Venn-Diagram serves to gain an impression of the knowledge of a target group about their institutional environment (KERSTAN 1995:279). The Venn diagram is a kind of social map of the community (see Figure 4). It can be used to show which individuals and groups have an influence on decision. It was used at the end of group discussions. The questioned women should name the institutions in their villages, compare the influences of these and estimate the possibilities of participation for women and men.

Fig. 4 Venn-Diagram of Institutions in Toro



4. Results

4.1. Participation of men and women in decision-making processes on village level

4.1.1. Toro

In general Toro is characterised by an individual administrative system, a well organised institutional structure, several agreements and contracts in the field of resource protection and by an above average number of politically and socially active people in the village population. Also the presence of many active development organisations leads to an above average level of organisation, particularly in the field of sustainable resource management. Additionally in recent years village organisations have been upgraded, to be equivalent in their decision-making structures to official institutions. In Toro five organisations work in parallel: 1) the village government, represented by the *kepala desa* (village leader), 2) the BPD (*Badan Perwakilan Desa*), the state village representation, 3) the LMA (*Lembaga Masyaakat Adat*), the council of elders, 4) OPANT (*Organisasi Perempuan Adat Ngata Toro*), the women's organisation, 5) FOHTKA (*Forum Hintuvu Kabilahga*), the village youth's organisation. Officially men and women have the same access to these institutions, but there is a strong inequality in favour of the men in actual participation.

The village government consists of the *kepala desa* and his colleagues. It consists exclusively of men. In principle most of the people asked, regardless of their gender, could imagine a female village leader. Whether this will happen in practice is questionable, as only a few women would be qualified for such a candidacy. At the time of the research the BPD consisted partially of women, but the leadership with one exception was male. The LMA consist of male and female representatives. According to the members the position of the gender is

equal. Rather the women have an important role, as they traditionally take a mediating role in cases of disagreement. Altogether women and men have similar influence and decision-making possibilities in the LMA as age and knowledge of traditional *adapt*-rules is decisive. The youth organisation FOHTKA exists only since 2004 and has the least influence of these institutions. The purpose of FOHTKA is to pass on the traditional knowledge of the older generation, for instance about resource management or village history. Here too male members predominate. This is above all because young girls rather go to Palu to go study or to earn money there, while young boys stay in the village to work in the fields. On the other hand married women are involved less in activities which are not directly related to typical female tasks in the village (like organising festivities).

The most important development in relation to gender-specific participation is the founding of the women's organisation OPANT in the year 2000. This organisation arose because of inadequacies in the state family welfare program (PKK). The organisation bases on a traditional system in that the leader takes the office of *tina ngata*, the "mother of the village". Almost all married women in Toro are members of OPANT, even if only a few attend the regular monthly meetings. The main objective of OPANT is to improve the position of women in the village. They want to support women in the following areas: Strengthening the self-confidence, increasing their political participation at village level as well as improving their possibilities to contribute to family income and thereby remain independent of men. In addition the traditional values and *adat*-rules are discussed to prevent them of being forgotten.

In relation to the work of OPANT one has to differentiate between the person of the *tina ngata* and the other members. Because the *tina ngata* is engaged in national and international events she has an understanding of the background and aims of gender-specific work, which only few women in the village can comprehend. Despite this discrepancy OPANT has achieved much in the village. The women describe themselves as more self-assured and see the value of what they have learned through OPANT. The reputation of OPANT in the village is to be seen as high. Not only that the organisation is at the same level as the other leading village institutions, it is also known to all respondents (this level of recognition was enjoyed otherwise only by the *kepala desa* and the *lembaga adat*). Moreover the organisation contributes to peaceful coexistence between the different religions and ethnic groups in the village, and gives the women an improved "we-feeling".

The position between the gender on village level can be described in total as equal. Women are represented in all five important village institutions, although with differing intensity. The reestablishment of the *tina ngata* formally guarantees the voice of women in all village decisions. Also in practise women take active and passive part in village life. The fine differences which still exist are only recognisable under close observation. For instance, it only became clear during the participatory group discussions with the women of OPANT, that women are less represented at village level than men. Their reticence can be explained by the culturally influenced division of roles between the gender (which was reinforced during the period of the „new order“) by which women are responsible for the domestic area and men for the public area. The time (work) burden on women does not explain this phenomenon.

4.1.2. Bulili

Bulili is mainly composed of migrant-households, which have moved to the region during the last five to ten years.⁴ Because of this only relatively few organisational structures could establish themselves. Furthermore Bulili has only been in the process of official recognition as a village since 2004. Until then it formed, under the name Nopu, part of the village Rahmat. Accordingly the important village institutions were only partially functional. This includes 1)

⁴ Cf. Discussion Paper No.11, FAUST et al. 2003

the village government including the *kepala desa*, 2) the state village representation BPD, 3) the *lembaga adapt* (council of elders), 4) the state family welfare program (PKK).

The *kepala desa* and his secretary have the main power of decision at this time. They are seeing to the consolidation of further institutions. Among the seven members of the village government there is not one woman. This applies also to the BPD, which theoretically has the most influence on village decisions alongside the village government. It remains very doubtful whether a woman will take on of these offices in the near future. Although a majority of respondents could imagine a woman in these offices, there appears to be no electable female candidate.

The *lembaga adat* only plays a minor role in Bulili so far. The basis of this newly founded organisation follows the *adat*-rules of the long-term resident *kaili*. It is expected of the immigrant *bugis* that they respect these rules. Currently the *lembaga adat* consists of four to six men, but the participation of women is not ruled out. The only prerequisite for membership in the council of elders is knowledge of the *kaili*-traditions. According to the legal requirements for the independence the committee of a PKK-group was elected in 2004. Although the invitation to the election meeting was aimed particularly at women, the majority of attendees were men (but only women could be elected). Many women showed great interest to become active in the PKK. They hope to gain new experience through this program and contribute to the village social life. It remains questionable whether the PKK-group will become active in village political decisions. Although neither gender is seen to have a higher level of organisational aptitude or special intellectual talent, the important organisations at village level are lead by men. Despite this, women are more involved in public life than it would at first seem. All official institutions are open to them in principal. They can speak for themselves and also on behalf of their husbands, if he is not available. They have the same speaking and voting rights as men. Further their good knowledge of social and political events in the village show a good information structure. In social areas, for instance the parent's organisation at the school, religious groups or neighbourhood aid actions, an increasingly active engagement is to be observed. The cause of a lower participation at village level is less pure gender attributes, but more daily habits, customary division of labour in the families and individual characteristics.

Fig. 5 Comparison of the participation of men and women in decision-making processes at village level in the researched villages

	Toro	Bulili
Village structure	Strong organisational structure. Existence of an active women's group since 2000	Weak organisational structure
Objective social and political position of the gender	Men take a slightly higher position than women	Men take a clearly higher position than women
Subjective social and political position of the gender	Men and women see their positions as equal	Men and women see men in a clearly higher position
Function of the gender in the village	Women are responsible rather for the social aspects and have a moderating role; men are rather responsible for political aspects and have a more offensive role	Women are responsible for the social aspects in the village; men for the political aspects
Dynamics	Women are actively engaged in an improvement of their position	Women hardly see a need to improve their position

4.2. Participation of men and women in decision-making processes at household level

In respect to gender roles at household level, the analyses of the research results shows hardly any difference between the two villages, nor between ethnic groups and religions. Without doubt the men are the heads of households in the villages. Theoretically this means that they represent the family to the outside world and have final power of decision inside the household. Additionally they carry financial responsibility for the family. The tasks of the women are oriented above all toward domestic work. In everyday life the gender roles sketched here have actually less importance and effect than may be assumed. The position that a person takes in a family depends among other things on their contribution to family sustenance. In the following we examine the division of labour and the corresponding positions of the gender in the families.

4.2.1. Toro

The division of labour in the household seemed at first to be a text-book case. While women are responsible for all tasks in the household, men take the responsibility for work in the fields and physically demanding tasks. Individual circumstances and events often lead to a mixing of the roles. However in general men will only undertake typical female tasks like laundry, washing up or cooking if the women is not available for instance through illness. On the other hand women often work in the fields, as we will see in the following chapter. The bringing up of the children is generally equally shared by men and women. Also relevant decisions in the life of the children are taken by both parents together. There is no conscious differentiation in the bringing up of boys and girls, neither in helping in the house nor in education.

The financial responsibility in households is ambivalently distributed between the gender. Officially the man is seen as the breadwinner in the family, but in fact women often contribute considerably to the family income. Additionally women are in almost all families responsible for the administration of the money. Often they have exclusive access to the housekeeping money and distribute the financial means according to the needs of the family. On the one hand it is the job of the woman to do the shopping. On the other hand there is the recognised tendency of the men to spend money on cigarettes, alcohol and gambling. Decisions about larger purchases, such as televisions or motorbikes, are being made by both partners.

The principle for both gender is to behave according to general standards set by the *adat*-rules or religious values. This applies also to domestic decisions which are governed by the Indonesian concept of harmony, „*musyawarah dan mufakat*“ (discussion and consensus). According to this every decision should be made in consensus by all members of the household. How this consensus is reached is a case to case matter. Altogether the relationship of the gender at household level can be seen as balanced. The slightly higher position of the man as head of household is qualified in daily life.

4.2.2. Bulili

In Bulili the division of labour between the gender on household level is similar to that in Toro. Women are above all responsible for domestic tasks and the administration of the finances, while men are responsible for work in the fields, earning the family income and all physically heavy work. The degree of male participation in the household depends on how far the women work in the fields. In the following chapter we will see that women in Bulili are less involved in work in the fields than in Toro. Also in the care of children the male participation depends strongly on the individual family situation, however usually both partners see this as a joint responsibility. Similar to the situation in Toro there is no recognisable difference in the treatment of boys and girls.

In Bulili financial responsibility is divided between the two partners. While the man is at least responsible for earning the family income, women administer the housekeeping money. As in Toro the reason for this is the woman's better understanding of the needs of the family. Also in Bulili it is recognisable that men tend to spend household money on personal consumer goods. The sale of agricultural produce is in principal handled by both gender. Although often it is the women's responsibility as merchants to buy the products directly at the house door and not directly from the fields, where the men are generally to be found during the day. Decisions about major purchases are made jointly as in Toro.

Altogether differences of opinion are settled according to the principle of „*musyawarah dan mufakat*“ (discussion and consensus). The bargaining position of a member of a household is not in the first place dependent on his or her sex, rather the ability to contribute to the needs of the family. Unsettled conflicts are clarified in the first place within the family. Divorces are not uncommon. Obvious misbehaviour by one partner can lead to ostracisation by the community.

Fig. 6 Comparison of the participation of men and women in decision making processes in the researched villages

	Toro	Bulili
Head of household	Generally men	Generally men
Earning of family income	Officially men, in practice both partners	Officially men, in practice both partners
Administration of finances	Generally women	Generally women
Household tasks	Women dominate, but men are involved	Generally women, men sometimes help
Care of children	Women dominate slightly, but men participate	Women dominate slightly, but men participate
Child upbringing	No differentiation between sons and daughters	No differentiation between sons and daughters
Bargaining positions in household decisions	The harmonious relation is important, but men tend to have higher status	The harmonious relation is important, but men tend to have higher status

4.3. Analyses of the influences of men and women on land use

4.3.1. Toro

Although women and men traditionally decide together about land and forest use, women today have lost influence at village level. They are however in the process of winning this influence back (cf. Chapter 5.1). At household level it is still normal to decide questions of land use together. According to Indonesian law and normal practice in the villages all assets in the family belong to both partners. This applies also to property, whether the fields are inherited, bought or cultivated. The present ownership structures are characterised mainly by inheritance. Inheritance involves property being divided equally among the children. New cultivation of land is in principle possible, but requires approval by the *lembaga adat* and the village head. Besides a fee has to be paid and certain *adat*-rituals have to be observed.

No dominance of either gender in respect to work in the fields was observed. Men and women work equally next to each other. In the division of labour there were fine differences. Men's responsibilities include hard, heavy or dangerous work, such as ploughing the fields, clearing new land for cultivation, collecting rattan or finding firewood in the forest. Women handle the sowing and planting. The gender-specific division of labour can vary according to the individual needs of the households. In some cases one gender dominates the work in the fields.

This can be the case, if the woman stays at home to look after small children, or the man is working outside the village.

The biggest differences between the gender could be seen in the comparison of the main crops rice and cacao. In rice cultivation women traditionally handle the planting. These days women and men work alongside each other in the rice-paddies. In the cacao-plantations there is a clear dominance by the men. Women undertake mainly only the simple jobs, while men generally carry the main responsibility. The reason is, among other things, that cacao cultivation is encouraged by external consulting institutions, whose meetings mainly the men attend. Through this the men have better knowledge. It was not confirmed, that men want to control cacao production because this is a cash crop and an important source of income for the family. The financial dominance of the women remains independent of the source of income in the most families. An expected further extension of cacao production instead of rice could bring a change in the practice of joint decisions on land use. Also changing behaviour patterns of the generations can bring upheavals in traditional structures. Young girls rather go to Palu to study or to work, while young men often stay in the village in agricultural work. A growing male dominance in agriculture is the result.

4.3.2. Bulili

As in Toro land in Bulili is in common ownership of the family. All children in the family are entitled to inherit, independent of age and sex. Because only a few households are resident in Bulili for more than one generation, most fields have been bought or newly cultivated. The former concerns mainly the families of the *bugis*, who took up residence in the village after the *kailis* (WEBER et al. 2007, WEBER&FAUST 2006). New cultivation is mainly done by the *kailis* to replace the fields they have sold. The result is massive deforestation in the protected area of the Lore-Lindu National Park.

In Bulili over 80% of the fields are devoted to cacao, rice cultivation is negligible. In the migrant village no work rituals and crop cycles have yet been established. Some of the migrant families have experience in cacao cultivation from their previous domiciles; others have to learn it from the beginning. Accordingly the participation of women in agriculture varies strongly. In most cases the women undertake only smaller assistant jobs, such as raking leaves together. Only at harvest time do they regularly work in the fields. In some families it is also usual, that women contribute to the family income by working for wages for other farmers. Care of small children often causes women to devote themselves exclusively to household work. Generally it is observed that women have a broad knowledge in agriculture. In respect to decisions on land use the situation varies from family to family. In some the man decides alone, in others both partners agree. In principle however the women's dominion is in the house and the men's is in the fields. Here no difference can be seen between generations.

Fig. 7 Comparison between men and women on land use in the researched villages

	Toro	Bulili
Crops	Mainly wet rice, some cacao	Mainly cacao
Land ownership	Men and women equally	Men and women equally
Land access	Men and women equally	Men and women equally
Work in the fields (rice)	Men and women equally	-
Work in the fields (cacao)	Men slightly dominant	-
Land use decisions	Men and women equally	Men and women equally
Knowledge of land use (rice)	Men and women equally	-
Knowledge of land use (cacao)	Men slightly dominant, tendency rising	Men slightly dominant
Dynamics	Young girls work less in the fields	Participation of young girls varies according to family

4.4. Analyses of the gender roles and of gender-consciousness

4.4.1. Toro

For both gender allocations, expectations and the resulting gender consciousness are in agreement with the results presented so far. The woman is given the responsibility for household, childcare and wellbeing of the family. It is expected of the men that they can feed their families and handle finances responsibly. They should present themselves in public as respectable and responsible persons. Misbehaviour by men and women is clarified within the family, or in serious cases brought before the *lembaga adat* and punished by this instance. There is a certain tolerance in society in respect to alcohol consumption and spending for personal consumption on part of the man. Only in serious cases the family or the community will take action. There is no difference in the radius of action of men and women. The rules of *adat* say that married people should not work outside the village, but families can decide this for themselves. It is often married men who work outside the village for a period. Women leave the village mainly to visit relations or to sell produce at the larger markets in the district. Among the unmarried it is women who form the large majority of those living outside the village, mainly to study or to take work in the town. Finally the research could not find any difference in the way of life and values of the various ethnic groups and religions. Although the people in Toro are conscious about their ethnic grouping and observe the corresponding customs, this does not influence the topics of this analysis. Despite a general division of labour and gender-specific differences in Toro there is in principle equality between men and women.

4.4.2. Bulili

The conception of the ideal roles of men and woman, respectively husband and wife, of the people in Bulili is similar to that in Toro. Men are seen as the head of household responsible for the family income. Women are mainly responsible for the work in the household. From both partners it is expected that they treat each other with respect and put the welfare of the family in the foreground. Women or men who do not stick to the standards and values of society are treated with little understanding. However such cases are less often punished by society in Bulili than in Toro. The reason is that the responsible institutions have not yet been established in Bulili. In most cases the families try to solve their problems internally. Societal values are mainly transmitted by religious institutions. Excesses by men in respect of alcohol consumption or spending of household money for personal consumption are tolerated as in Toro. It is however reported that young men often tend to excess in this respect. The freedom of movement for women is more restricted than that of men. Women may not leave the house

without permission of their husbands, and this in most cases only with an escort. This rule is interpreted differently according to the family. There are no places which are not accessible to men, respectively women. Young people spend their free time with mixed male and female friends to which the parents have no objection. Between the ethnic and religious groups no differences could be found in gender-roles and gender-consciousness. The results apply to Christian and Islamic and all ethnic groups.

5. Final Statement

The results of this study show far-reaching parallels between the two researched villages. One can assume that these apply to the whole region of the Lore-Lindu National Park. However individual influences on the researched aspects are not to be ignored. The divergences between the researched villages are mainly founded in the differing conditions in the villages.

The first point of analyses was the possibilities for influence of men and women on decision making processes at village level. It was seen that the results differ strongly between the two villages. This is on the one hand explained by the better organisational structure in Toro, which could develop in the traditional way and is in its present form unique in the region. On the other hand Toro has a very active women's organisation, the existence of which is the result of the efforts of one female resident. These two circumstances have led to near equal representation of men and women in the decision making processes of the village Toro. In Bulili on the other hand no woman is involved in the village institutions. Because of this both men and women see the decision making position of men as considerably higher than that of women in the village.

The results of this analysis on village level can mainly be explained by the historical background of Indonesia. In many societies of this multi-ethnic state women traditionally had an equal position. Through the adoption of Christian and Islamic values the man receives a higher importance. At the latest the period of the „new order“ this role division was established in Indonesian society and characterises it still today. In recent years however women, mainly from the upper classes, have increasingly occupied the public space. Further the decision making possibilities of men and women in the families were researched. Here few differences could be found in the two researched villages. In general men take responsibility for the family income and represent the family to the outside while women are mainly responsible for the household tasks and the control of the family finances. In principle men and women see themselves as equal partners. The harmony in the family is very important. Most important principle in the households is that of „*musyawarah dan mufakat*“ (discussion and consensus), which says that every decision has to be taken by all members of the family. However it was observed that women often subordinate their interests to family harmony.

In the third point of analyses the participation of men and women in land use decisions was researched. The results show clear differences between the researched villages, which are mainly the result of the type of crop cultivated. In Toro differences between men and women could not be found either in relation to the work processes in the crop-cycle, nor in knowledge of the agricultural techniques. Cacao production, which has only recently been introduced as a cash crop, has caused a slight dominance of the men. But both gender in Toro feel equally responsible for work in the fields and normally take land use decisions together. In Bulili a male dominance is noticeable in the preponderant cacao production. Despite this the role of women in land use decisions is not to be underestimated. Although the women are less integrated in work on the fields, they still have deep knowledge of agricultural techniques. Important land use decisions are reached jointly in families although this varies strongly from family to family. This finding is important for the stabilisation of rainforest zones. In order to influence the people in this region toward protection of forest margins, it is decisive to also involve the

women. Otherwise there is a danger of disturbing the balance of the gender positions inside the families.

The results of the analyses of gender roles and gender-consciousness reinforce previous statements. The responsibility of the women is seen mainly in the private intra-family area, while that of men is mainly in the public area. The mutual respect between the marriage partners and for their respective field of responsibility plays an important role. In respect to agriculture there is an allocation of different tasks, but in the control of land resources both gender have an equal say.

Indonesian terms

<i>adat</i>	Traditional rules and rituals and common law
<i>desa</i>	Village
<i>dusun</i>	Village section
<i>kepala desa</i>	Village head
<i>kepala dusun</i>	Village section head
<i>lembaga (masyarakat) adat</i>	Council of elders
<i>musyawarah dan mufakat</i>	Discussion and consensus
<i>ngata</i>	Village (in kulawi)
<i>pemerintah Ngata</i>	Village government
<i>tina boya</i>	„Mother of the village section” (an office in Toro)
<i>tina ngata</i>	„Mother of the village“ (an office in Toro)

Bibliography

- AGRARWAL, B. (1994): A field of one's own. Gender and land rights in South Asia. South Asian Studies 58. Cambridge
- ANDAYA, L.Y. (2000): The Bissu. Study of a Third Gender in Indonesia. In: Andaya, B.W. (Hrsg) (2000): Other Pasts. Women, Gender and History in Early Modern Southeast Asia. Honolulu. P. 27-46
- ARUN, S. (1999): Does land ownership make a difference?. Women's roles in agriculture in Kerala, India. In: Sweetman, C. (ed.) (1999): Women, Land and Agriculture. Oxford. P. 19-27
- BROWN, D.; HOWES, M.; HUSSEIN, K.; LONGLEY, C.; SWINDELL, K. (2002): Participatory Methodologies and Participatory Practise: Assessing PRA Use in the Gambia. (=odi-Agricultural Research & Extension Network, Paper No. 124). London
- CHAMBER, R. (1992): Rural Appraisal: Rapid, Relaxed and Participatory. (=Institute of Development Studies, Discussion Papers 311). Sussex
- FAUST, H., MAERTENS, M., WEBER, R., NURYARTONO, N., VAN RHEENEN, T., BIRNER, R. (2003): Does Migration lead to Destabilization of Forest Margin Areas? Evidence from an interdisciplinary field study in Central Sulawesi. Göttingen, Bogor. STORMA Discussion Paper Series Sub-Program A, No. 11, 28 P.
- FOOD AND AGRICULTURE ORGANIZATION (FAO) (2005): Building on Gender, Agrobiodiversity and Local Knowledge. A Training Manual. Available via: http://www.fao.org/sd/links/documents_download/Manual.pdf, found 19.11.2005
- FOOD AND AGRICULTURE ORGANIZATION (FAO) (1998a): Gender and Food Security. Agriculture. Available via: <http://www.fao.org/Gender/en/agrib2-e.htm>, found 22.04.2004
- FOOD AND AGRICULTURE ORGANISATION (FAO) (1998b): The Feminisation of Agriculture. Available via: <http://www.fao.org/Gender/en/agrib2-e.htm>, found 22.04.2004
- GÖLER VON RAVENSBURG, N.; JACOBSEN, I. (1999): Gender Responsive Land Tenure Development. Sector-Project Land Tenure In: Development Cooperation. GTZ. Eschborn.
- KABEER, N. (1994): Reversed Realities: Gender Hierarchies in Development Thought. London
- KERSTAN, B. (1995): Gender-sensitive participatory approaches in technical cooperation. Trainers' manual for local experts. GTZ. Eschborn.
- LI, T.M. (1998): Working separately but eating together: personhood, property, and power in conjugal relations. American Ethnologist, 25 (4). P. 675-694
- LOCHER-SCHOLTEN, E. (2000): Colonial Ambivalencies. European Attitudes towards the Javanese Household (1900-1942). In: Koning, J.; Nolten, M.; Rodenburg, J.; Saptari, R.

- (Hrsg.): Women and household in Indonesia. Cultural notions and social practise. Richmond, Surrey. P. 28-44
- MANION, H.K. (2002): Ecofeminism within Gender and Development [ejournal]. Available via: <http://www.lancs.ac.uk/staff/twine/ecofem/manion.pdf>, found 08.06.05
- OBERHAUSER, A.M.; RUBINOFF, D.; DE BRES, K.; MAINS, S.; POPE, C. (2004): Geographic Perspectives on Women. In: Gaile, G.; Willmot, C. (Hrsg.) (2004): Geography in America at the Dawn of the 21st Century. Oxford. Available via: http://www.geo.wvu.edu/~oberhauser/GPOW/web_chapter.htm#Toc32970277, found 08.06.05
- PEARL, R. (2003): Common Ground. Women's Access to Natural Resources and the United Nations Millenium Development Goals. (=Women's Environment & Development Organization (WEDO)). Available via: http://www.wedo.org/sus_dev/common_final.doc, found 05.05.2004
- PUTRI, E.I.K. (2002): Integration von kontingenter Bewertungsmethode und partizipativen Ansätzen am Beispiel des *Gunung Gede Pangrango* Nationalpark in Indonesien. Göttingen
- SAPTARI, R. (2000): Women, Family, and Household. Tension in Culture and Practise. In: Koning, J.; Nolten, M.; Rodenburg, J.; Saptari, R. (Hrsg.) (2000): Women and household in Indonesia. Cultural notions and social practise. Richmond, Surrey.
- SCHIPPERS, B., WEBER, R., FAUST, H. (2007): Agricultural Household Types in Upland Sulawesi, Indonesia - A Classification Approach. STORMA Discussion Paper Series Sub-Program A, No. 21
- SWEETMAN, C. (Hrsg.) (1999): Women, Land and Agriculture. Oxford
- ULBERT, V. (1999): Partizipative Gender-Forschung. Umweltprobleme und Strategien der Ressourcennutzung in der Dominikanischen Republik. (=Freiburger Studien zur Geographischen Entwicklungsforschung, 17). Saarbrücken
- UNITED NATIONS DEVELOPMENT PROGRAM UNDP (2006): Human Development Report 2006. Beyond Scarcity: Power, Poverty and the Global Water Crisis. New York
- WEBER, R. (2006): Kulturlandschaftswandel in Zentralsulawesi: Historisch-geographische Analyse einer indonesischen Bergregenwaldregion. Göttingen: Universitätsverlag Göttingen. (= Schriftenreihe PAZIFIK FORUM der Arbeitsgemeinschaft für Pazifische Studien e.V., vol. 12)
- WEBER, R., FAUST, H. (2006): Kulturelle Aspekte der Landnutzung in Indonesien - Einflüsse von Migration, Ethnizität und Wissen auf bäuerliche Entscheidungsprozesse im Hochland Zentralsulawesis. In: *Geographica Helvetica* (4), p. 234-236.
- WEBER, R., FAUST, H., SCHIPPERS, B., MAMAR, S., SOETARTO, E., KREISEL, W. (2007): Migration and ethnicity as cultural impact factors on land use change in the rainforest margins of Central Sulawesi, Indonesia. In: Tschardt, T. et al. (eds.): The stability of tropical rainforest margins, linking ecological, economic and social constraints of land use and conservation, Springer Verlag Berlin, p. 417-436
- WHITEHEAD, A. (1985): Effects of Technological Change on Rural Women: A Review of Analysis and Concepts. In: Iftikhar, A. (Hrsg.) (1985): Technology an Rural Women. Conceptual an Empirical Issues. London. p. 27-64