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# The making and unmaking of gendered crops in Northern Ghana<sup>1</sup>

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## Abstract

Based on fieldwork among the ethnic groups of Dagombas and Kusasis in Northern Ghana, this analysis shows how the construction of gender and crop categories are intertwined and subject to negotiations. The linking concept between gendered responsibilities and access to the cultivation of crops is the ideological connotation entailed in who makes contributions to the proper meal. This consists of the categories staple and soup, which act as the blueprint for assigning crops to a specific gender. While men are responsible for providing millet or maize, they turn to onions and cowpeas as cash-crops in order to acquire the staple. Traditionally, certain taboos have ensured that staple crops would be a male domain, but this domain today remains male because of women's exclusion from access to technology. Women's local soup-ingredient, 'kpalago', which is made from the fruits of the 'dawadawa' or locust bean tree (parkia clappertoniana), is slowly being substituted by soybeans. Among the Dagombas, the 'dawadawa' fruits symbolize the male power hierarchy. Their replacement by soybeans represents an encroachment of male territory, which has to be orchestrated in a clandestine manner. Furthermore, soybean cultivation is Dagomba women's gateway into own farming activities and for Kusasi women, it opens up viable economic activities. Thus we observe the making and unmaking of gendered crops, demonstrated by the case of the transforming staple and the transcending soup.

#### 1. Negotiating gender relations

The relations between the social categories of male and female gender has been conceptualised as a process of continuous construction and reconstruction. In the negotiation over these relational categories of gender, agricultural plants appear as vehicles transporting social significance. These crops experience an instrumentalisation as carriers, connoting meaning in a certain cultural context. The placement of an innovation in the cosmovisions of the farming population and its connection to existing gendered images of crops decides upon its approachability. This infusion of innovations with existing stereotypes is a result of the ongoing negotiations over their position in a gendered life-world (Padmanabhan 2002). On the other side, the anchorage reflects the chances of men and women possibly cultivating a certain crop with respect to their equipment and the necessary inputs.

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## 2. Farming- and food systems in Northern Ghana: The "proper meal" of staple and soup

Households in Northern Ghana are patrilocal and polygamous; work and responsibilities are distributed along gender lines. Among Dagombas and Kusasis alike, men are obliged to provide starchy staples such as millet, maize, and yams. Women are responsible for the complementary soup and the preparation of whole meals. Women spend a tremendous amount of their income on ingredients for soup such as vegetables, salt, fish, and fat. An indispensable element is the soup ingredient *kpalago*, rich in proteins (Padmanabhan 1998)<sup>2</sup>. The exchange of knowledge on the lately popularised crop soybean and even more so on the traditional raw material it replaces, is not only dominated by economic considerations, but also encompasses a moral and normative dimension.

#### 2.1 The Construction of Gender among Dagombas in Dagbon

Polygamy is the rule in Dagbon (Goody 1973:183). An institutionalised maternity leave exists in Dagbon. After the birth of her first two children, a young mother will return to her parents house until the offspring is able to walk. This allows a smooth transition into motherhood and finally to the office of a "cooking-wife". It enables the  $dwakana^3$  to earn her bridewealth, consisting of utensils for future domestic cooking as well as processing for income generation and a cupboard for their effective display. The enamelled pots define the space of her most immediate authority (Mack 1991:116). This unique rite of passage lays the foundation for economic enterprises and personal possessions. A woman will strengthen her ties with her own family at the expense of her conjugal family. It is an investment not only for her dowry, but also as a precaution for future misfortunes like widowhood and divorce as well as menopause, when the compound of her brother will take her in again (Wardrop-Deloitte 1983:4.32). She will return to her natal home for a second maternity leave before having marked her transition into a full cooking wife with the moni-ceremony. With the highest status of a cooking wife, responsibilities increase. The women has to provide the soup-ingredients for each meal she cooks. The urge to supply the ingredients for the soup that will supplement a staple dish generates a constant demand of cash to cover expenses or, in kind, to avoid them. This is the impetus and the moment when women consider farming.

#### 2.2 The Construction of Gender among Kusasis in Toendema

The Kusasis in Tondema experience gender as a construction around women's compulsory residence. This rather static arrangement - compared to Dagbon - is achieved by a system of dowry, paid by the groom in the form of cattle to the bride's father<sup>4</sup>. The exchange of cows is not merely a mechanical or economic transfer, but a moral one, indicating and sustaining the relations between two groups (Mauss 1996:12). The animal transfer works as a security for the wives remaining in the husband's house. This dominating institution, dowry, explains the wider family's interest in the long-term stability of the marriage. Ideally, she will remain a resident from the day the bride moves into her husband's house. No institution such as "maternity leave" is known in Toendema. The sedentary pattern in the Upper-East-Region is enforced by the custom of only a symbolic bridewealth in form of a ritual calabash. The absence of individual property in the early years of marriage reduces room for negotiations, but a perspective in agriculture is opened by the prospect of residence. The continuity of relations and the right to customary fields explain the high involvement in individual farming. In comparison to Dagbon, Kusasi women's cropping of rice, beans, and okra for cash and consumption is a standard practice. Women are bound to become domestic once dowry has been paid. Consequently,

<sup>&</sup>lt;sup>2</sup> In francophone West-African countries the tasty paste *ne're'* is described as "mustard" (Brüntrup; Brüntrup-Seidemann 1997:17).

<sup>&</sup>lt;sup>3</sup> Term for women on maternity leave at their parents house (Dagbani).

<sup>&</sup>lt;sup>4</sup> The concentration on male institutions prevents the perception of female spaces, their deterioration and consequences for independent action and the women's economy (Lachenmann 1996:233).

women's agricultural involvement is far more pronounced and results in a compulsion of residence.

# **3.** Construction of crops categories: Men growing staple: Millet and Maize **3.1** Dagombas: Local Beans and Improved Cowpeas

Dagombas traditionally grow legumes like beans, inter-cropping them with millet, maize and cassava. Two basic families of varieties are grouped together by farmers in the Northern Region: "We have all been created by God and we, the illiterate ones, have our seeds that do not need spraying, but any seed that you, the learned ones, comes out with needs some spraying. Why is it so?" (NR:M<sup>3</sup>). Local beans and improved cowpeas are two distinct categories, distinguished by resistance to insects, or the necessity of applying agrochemicals. The rhetorical question above attributes a specific status symbolised by literacy to the possession of special knowledge, thus indicating the social anchorage of information. Usually beans and cowpeas are grown by men. Generally speaking, the local ones go into the feeding of the compound members, while the improved ones generate income for senior and younger men. A Dagomba lady explains: "We share it [local varieties M.P.] among we the women and we use it for cooking for the family. The landlord and then the young men cultivate this, the gampawage<sup>6</sup>"(NR:W). Cowpeas are not restricted to men, but the circumstances and the risk involved in cultivating cowpeas result in abstinence on the part of women, who prefer the local varieties because of their undemanding nature. This can be read as a resistance to exploitive farming systems (Mbilinyi 1997:360). "Why we like our local one, is that it doesn't need any chemical spraying. If you sow it anyhow, you will harvest nicely, but with the gampawage, without chemicals, vou are at loss" (NR:W). Furthermore, women's assessment of beans is governed by the need to end the hunger period and secure their livelihood<sup>7</sup>. While the *gampawage* fades into the realm of men's cash crops and moves out of women's direct reach, local beans hold more weight in a woman's reality. Cowpeas have an indirect way of providing income for the landlord. The degree a woman benefits from those profits depends on her power to negotiate.

#### 3.2 Kusasis: Millet in Barns and Pots

Upper-eastern Ghana is populated by people of heterogeneous ethnic descent, among them the Kusasis. The essence of being a man or a woman is described by referring to the work they perform. The gender-sequential division of labour (Whitehead 1993:XLVII) around millet is one field where identities are established through performance. The crop dominating the farming patterns in the Upper-East Region is millet, in late and early varieties. The growing of millet and especially the delicate weeding lies at the heart of male identity. The daily staple for TZ<sup>8</sup> consists of millet which is perceived as the forefather's plant, sacrificed by the whole community on Thanksgiving - Samanpeet - under the guidance of the earthpriest. Men are perceived as the provider of the staple, and the patriarchal construct of the breadwinner reigns (Whitehead 1985:63). The barn in front of the compound is the symbol of the power the landlord exercises over resources and is considered a male attribute. The most senior man controls the barn and thus the whole millet of a farming unit (Whitehead 1993b:XXXI). Brothers may share one compound, but farm in two different groups, independently from each other. This is recognisable in a second gate in the house's wall, which is guarded by another barn. The interactions in the compound concerning millet are important for understanding the impact of new agricultural crops like the onion. The landlord in control of the staple orchestrates its distribution to the cooking women. All

<sup>&</sup>lt;sup>5</sup> All citations from interviews by the author. Acronyms: NR: Dagomba, UE: Kusasi, M: man, W: woman.

<sup>&</sup>lt;sup>6</sup> Improved cowpea variety (Dagbani).

<sup>&</sup>lt;sup>7</sup> Food can be prepared out of the leaves of the local varieties, but not in the case of improved ones, which need to be sprayed. The recipes collected by the Ministry of Agriculture are concerned merely with the bean itself (MOA 1990:25).

<sup>&</sup>lt;sup>8</sup> TZ, colloquial abbreviation for tesao zaffo (Haussa), the basic millet dish.

millet is stored in barns recognisable from far in front of the compound. Women are forbidden to look inside, and the strength of this prohibition is impressively illustrated by a ritual at the landlord's funeral, when the widow has to look into her husband's barn. One small boy is selected by the landlord to serve measured portions of millet at intervals of about once a month to all cooking women<sup>9</sup>. Women can draw conclusions on the remaining contents of the barn by the amount the child is distributing.

## 4. Transformation in the construction of crop categories

## 4.1 The Exclusiveness of Technology in Dagbon: Insecticides and Spiritual Medicine

The cowpeas' strategic position as a cashcrop turns it into a staple. The inevitable transformationprocess via monetarisation associates cowpeas with staples and allows a redirection of profits for other purposes. The example of insecticides illustrates the embedding of new technologies in already existing categories of meaning. The insecticides are associated with the concept of local medicines, prepared out of herbs and spiritual matters. In the absence of spray, it is not possible to grow cowpeas. It results in immature plants and failure. Those who applied the insecticide understood a modern chemical as having powers equivalent to those of local concoctions, which result in positive effects and healthy plants bearing fruit. The soothsayer explains the indigenous idea of medicine, the term that is equally applied to insecticides: "Medicine is made up of roots of trees and herbs and either an animal or fowl. This fowl or animal is slaughtered and the blood put on top of these roots and some secret incantations said" (NR:M). The liquid consists of plants and magic knowledge, accompanied by the sacrifice of an animal's life, the sum of which spells powerful ingredients for influencing fate. Nevertheless, it is not the material substance that is working, but invisible forces: "It works in the form of air! You never see medicine" (NR:M).

The result of the application of the concept of local medicine on insecticides is a taboo for women's use of spraying. Consultations with the soothsayer in search of remedies for illness, bad luck and spiritual problems is the domain of men. In Dagbon, women neither handle medicines nor are involved in identifying supernatural issues. While insecticides are out of reach for women, applying fertiliser is associated more with sowing, a female gender-sequential labour. Women express strong reservations against sprays because they are suspicious of the side effects, linking the construction of the male gender to the danger radiated by the new technology. "Because it can kill a human being that is why we don't want to do it. Moreover, the men are stronger so it is they who can resist the poison" (NR:W). Men's association with powerful medicines equips them with knowledge of potentially harmful essences. The classical interface situation arises when agrochemicals are used in a rural setting where nobody is able to decipher the instructions, health warnings and storage techniques in English, not to mention instructions in Japanese. Men appear to be protected by depersonalising, impressive masks: "They have protection for the mouth and nose that is why they can do it. Moreover, if a woman returns home from spraving and your child immediately wants to suck breast. What will you do if you have not yet taken your bath?" (NR:W). The segregation of women's nursing and men's handling of medicine are spheres that are mutually exclusive<sup>10</sup>. Knowledge is closely tied to gender identities. The flow of information between the genders does not take place, making the already perilous substance more suspicious for women. With the advent of the technology of spraying, completely new gender-sequential work has entered the farming system in Dagbon.

<sup>&</sup>lt;sup>9</sup> Women have no control rights over the millet they are involved in producing. Furthermore, men organis e the redistribution of the surplus among themselves. For Molyneux, (1989:123) this represents a double exclusion from equal access. Women create the means out of which inequality and change develop. The accumulation of property, the disintegration of communal production and increasing subordination of women can be observed.

<sup>&</sup>lt;sup>10</sup> The importance of exclusions, i.e. taboos, in development work has been analysed by the anthropologist Kirby (1987) for Northern Ghana.

#### 4.2 The Perpetuation of Exclusion in Todema: Modern Monopoly on Fertilizer

The onion was introduced to the Upper-East-Region by immigrants and has turned into a major cash crop in the last decade. The influence of the construction of gender on the social incorporation of new agricultural plants can be demonstrated with the case of onion cultivation. Because of its demands on irrigation, inputs, and intensive labour in the dry-season, the onion requires a moulding of the existing organisation of agricultural patterns (Tonah 1993:101). Against this background, men started to farm onions. While sons do not have separate millet plots, farming instead on the landlord's field for the compound, onion farming falls into a different category. It qualifies as a cash crop and finds its place on the individual farms of the young and middle-aged men. On these fields, the powerful landlord has no say, thus onion cropping is a disguised emancipation from the father, with whom the whole life and all possessions have to be shared. Onion cultivation induces a shift in the power balance between the male generations, but solidifies the unequal relation of the genders. Men possess the power over the marketing of the onions and, consequently, decide on the usage of the profit. Since the bulbs are seen as a millet substitute and are grown under his individual responsibility, he is in complete control of the remuneration, be it for positive or negative. This precious onion money serves further purposes. Beside the buying of millet, marriages are sealed with the payment of dowry in the form of cows and rooms are roofed with highly-valued corrugated iron, known as zinc. The massive investment in onion farming is explained by the higher productivity of the land compared to that of millet. This is the crucial point of the new crop onion as a strategy in the strive to accomplish higher food-security. The cash crop has to undergo transformations before it can actually fulfil this aim and fill the stomach. Women who are interested in growing onions not only compete with men over resources, but also lay hands on the construct of the breadwinner. The standard procedure of saving for dowry is the line of accumulation from crops to small animals that multiply to pay for ruminants. This mode of saving is drastically shortened by the cultivation of onions. Because of this structural and ideological reason, many try to exclude women from onion cultivation. With the advent of onions, the profits from its sale can be directly used to purchase cattle and arrange for dowry. When onions are a central instrument for arranging marriages, women have to be excluded, similar to the millet cultivation.

#### 4.3 The transforming staple

New agricultural crops with a categorical proximity to staples induce a social process that transforms the knowledge on existing crops for application on the novelty. This remodelling of concepts in the case of the staple's substitutes is prominently evident in the changes exclusions undergo. Gendered monopolies and exclusions related to specialist knowledge experience either an extension, in the case of Dagbon, or a shift, in that of Toendema.

#### Men's medicines and women's witchcraft: Cowpeas in Dagbon

A transformation of the concept of spiritual medicines can be observed in their relation to pesticides. The necessity of implementing agrochemicals, as a consequence of cultivating the improved cowpeas, presents itself as a an undisputed opportunity to extend the concept of spiritual medicines to insecticides. The consequence of embedding the new input into the local system of references is the exclusion of women from the technology of chemical plant protection. This exclusive incorporation of the new variety in the male realm further stresses the peas' enhancement towards staples. The extension of a knowledge monopoly on a new technology illustrates the instrumentalisation of agricultural innovations in the construction of gender.

#### Male money and female food: Onions in Toendema

A transformation of exclusions from millet to onion cultivation takes place. An expansion of exclusion can be witnessed in Dagbon, while the development in Toendema is unfolding quite differently. The ban withholding women from farming millet cannot be maintained in the face of

decreasing food security. Women venture into the direct production of the daily staple, followed by new forms of storage and access. A deterioration of men's privilege to grow the important cereal coincides with the impossibility of yields sufficient for the whole household. This is a condition for the growing importance of onion cultivation as a cash crop to provide means for the purchase of millet. More barriers of access are erected in the field of onion cropping. Women's expansion into cereal farming is counteracted by the establishment of sublime barriers to the female cultivation of onions. In this case, the staple-replacing innovation unfolds transformative powers by shifting restrictions from one crop to the other.

## 5. Women's soup

A comparison between the case of soybeans in the Upper-East and the Northern Regions demonstrates the change in the category of "soup". The traditional raw material for the soup ingredient kpalago, the dawadawa seed, can be partially or fully replaced by the agricultural innovation soybean. This relationship is central to the analysis of the cultivation and processing of soybeans. A possible alternative to the indigenous soup ingredient *kpalago* is the modern maggi-cube, thereby incorporating an industrial product into cooking practice. These developments in ingredients are accompanied by social changes between the genders and are significant for relations among women. Goody (1992:69) observes an intimate link between the production, distribution and consumption of food, especially in Africa, where preparation is a time-consuming process. In both areas, the condition for the soybeans' care is set by the organisation around the traditional *dawadawa* seeds. It takes different interactions to supplement or substitute this seed with sovbeans for the production of soup ingredients. The actual cultivation differs in strategies and tactics according to the duration of women's practice of individual agriculture. The *dawadawa* seed is the traditional raw material for the soup ingredient *kpalago*. The tree known as dawadawa is the plant parkia clappertoniana (lat.), which is prominent in the bush-savannah as a result of selective cultivation (Maydell 1990:339). The tree bears fruit in the dry season. The sweet pulp of the pod provides a type of inexpensive food during the hunger season.

#### 5.1 Processing dawadawa in Dagbon: Symbol of male power and hierarchy

The dawadawa is a chiefly regalia in the Northern Region. In Dagbon, trees are scarce and therefore highly valued and even praised in songs (Mensah 1979:6). Women have a strong identification with the trees owned by their husbands and the continuity of ownership and participation in the wider political network adds a special flavour to the satisfaction gained from eating. Women store *dawadawa* seeds for emergencies. Even if all surpluses have to be sold by the male owner, she should possess a stock of *kpalago* for self-reliance. Through the intensive processing, women's identification with *dawadawa* is equally strong as the men's. Their duty to add taste to the food with their soup can only be achieved with the implementation of *kpalago*. The taste of *kpalago* is typical in meals in the villages, especially in lean times, when other soup ingredients are not affordable. Knowing the taste of the house is, furthermore, a woman's means of acquiring membership to a compound; nevertheless, the continuous, daily demand for kpalago in virtually every dish, with its importance for taste and symbolic meaning, presses women to find solutions for dwindling supplies of dawadawa. Kpalago is the most important soup ingredient, representing a cost-factor in the women's budget. These expenses are a main driving force for women to go into farming. Instead of having expenses for sunna and groundnuts, women would rather invest in farming itself.

#### 5.2 The decay of a symbol in Toendema

The relationship between peoples of heterogeneous ethnic identity in the Upper-East Region and their *dawadawa* trees has underwent drastic changes in recent years. Severe population pressure has reduced the number of trees, and communal conflicts have led to the collapse of the

institutionalised maintenance and distribution system. Nowadays women are no bnger able to use *dawadawa* seeds<sup>11</sup> to cover their demand for raw material for *kpalago* and are now shifting to soybeans. Women have started to farm soybeans as a substitute for the purpose of *kpalago*-preparation. When men assume sufficient supply but women experience scarcity, different goals, perceptions, and assessment criteria are expressed, according to gender. The distribution system for *dawadawa* seeds has experienced a destabilisation. Still, the raw seeds connote male identity, while *kpalago* is understood as a symbol for women (Meier 1997:96).

The mother-in-law must supply her daughter-in-law with ingredients, since the younger cooks in the senior's courtyard. Being able to offer soup-ingredients secures the control over newcomers to the compound. The monopoly of older women producing the real *kpalago* out of *dawadawa* represents a crucial position of power. The transmission of knowledge to prepare *dawadawa* had previously been significant for acquiring a higher status among the women in a compound. "Since we grew up from our childhood we where doing it, but we didn't allow small girls to participate in boiling it. Unless you deliver and deliver and deliver you are allowed to boil real dawadawa" (UE:W). Only after having had three children, a basic requirement to inhabit a courtyard of one's own, could daughters-in-law be taught by their mother-in-laws the art of turning the savannah fruit into a soup ingredient. The participation in the preparation of this most important spice of life indicates full womanhood and the knowledge necessary to fulfil all women's duties.

#### 6. Change in the construction of soup categories

#### 6.1 Supplementing the original in Dagbon: Appropriating innovation to tradition

In the Dagomba practice of *kpalago* preparation, the soybean supplement is not simply added to indigenous *dawadawa* seeds. It joins the cooking pot in a sealed plastic bag to be boiled alongside it. The adaptation of soybeans in *dawadawa* cooking is explained by a cooking-wife: *"We separate it, but we mix it in the same pot. We put the selentujia into a rubber-container, tie the mouth, and add it to the dawadawa. But throughout the whole day it will be in the water until the next morning" (NR:W).* This separation of soybeans from the *dawadawa*. Soybeans are perceived as a mere addition and supplement to the actual *dawadawa*. This prevents Dagombas from realising the time-saving and firewood-saving potentials which the shorter boiling time allows. Since the longer boiling-time of the *dawadawa* seed results in a cooking duration of four days, this characteristic of the soybeans goes unnoticed. *Dawadawa* is still the dominant raw material for preparing *kpalago* and the usage of soybeans as the sole ingredient for *kpalago* is not known.

#### 6.2 The soybean as a substitute among Kusasis

In the Upper East Region, the soybean is called *nasaal sunni*, meaning "white men's *dawadawa* seeds". Unlike the Dagomba, Kusasi women can produce *kpalago* solely out of soybeans. In the Upper-East-Region, *kpalago* has developed into a commodity and a major source of income for older women. Soybean *kpalago* can be prepared much faster than the one consisting of *dawadawa*. The Kusasi women have reduced the demand for firewood by adopting the entire crop for their purposes rather than just adapting it. This fuel-saving characteristic is one important reason for the replacement of the real *dawadawa* with soybean as a base for *kpalago*. The time-

<sup>&</sup>lt;sup>11</sup> Like Dagomba women, Kusasi women process three parts of the dawadawa pods. The seeds for *kpalago* and the yellow powder for a light porridge are utilised in cooking. The peel is used for the production of dye for colouring houses, painting murals and decorating clay pots, since many women engage in art work. After soaking the shells and pounding them, the water can be sprinkled onto mudwalls to improve their consistency, or further cooked into a thick paste used for wall paintings and the polishing of storage pots.

saving effects are apparent when women do not have to search for big logs of firewood in the already deforested area of the Upper-East-Region.

The position of young married women in relation to their mothers-in-law has altered dramatically. With the possibility of farming soybeans on their own or buying them at the market to process them by themselves, their dependence on the distribution of the *dawadawa* by the men and on the knowledge of the mothers-in-law is no longer unavoidable. "But the maggi kpalago one, even you girls do it to sell" (UE:W). While the processing of real *dawadawa* used to be the privilege of older women, no limits of age or status are attached to the soybeans. In the transmission of processing knowledge, demonstration is as important as the relationship between the actors. "I brought the maggi<sup>12</sup> from a friend and asked her how they do it, and she showed me how to do it. She is a Christian." (UE35:W). The influential position of Christian churches as a network beyond family relations and as a replacement for family ties creates a social space for exchanges among church sisters.

Comparing the situation and interactions in both regions, the diversity of African rural women becomes apparent. Dagomba women can integrate the soybean innovation by adapting it into an existing context and, at the same time, venture into pioneer farming. Kusasi women have begun adopting the new crop into their farms and kitchens. The soybean has entered the fields, effectively replacing the vanishing *dawadawa* seeds. Simultaneously, the soybean changes the relationship between mothers- and daughters-in-law that was previously expressed and centred around the original seed. The soybean breaks from customary co-operation, but opens possibilities for economic endeavours.

## 7. The transcending soup

The innovation associated with the food category of soup-ingredients, the soybean, displays a transcending potential for the women associated with it. When the "soup" crop opens up new dimensions of women's activities, the given situation is subject to enormous social change. The increasing involvement of Dagomba women in farming relies to a great extent on the icebreaker function of soybeans. Similarly, the existence of the legume allows Kusasi women to face and overcome the acute shortage of traditional *dawadawa*-seed and establishes new businesses.

#### 7.1 The soup-ingredient as the gateway to farm: Soybeans in Dagbon

A transcending quality of change is realised when women begin to farm the innovation on their own plots. In a cultural setting where the cultivation of fields, especially monoculture, is understood as a male activity, the growing of soybeans expresses a new dimension in women's involvement in agriculture. The advent of the frugal soybean operates as an initiator for women's venturing into farming and the development of working groups in the field. The articulation women demonstrate by being professional farmers like their husbands shows the direction of development that drastically changes gender relations, accelerated by the advent of agricultural innovations.

## 7.2 Processing is possessing: Soybeans in Toendema

With no barriers of symbolically-charged meaning attached to the soybeans, women engage in processing and marketing activities. In this exclusively female economy, the gendered knowledge on processing secures the access to this soup-ingredients market. The emancipation of junior women from the seniors and their processing knowledge on *dawadawa* induces changes in the relations within the gender. With knowledge on *kpalago* freely and easily available, the agricultural innovation opens up economic spheres. The cultivation and utilisation of soybeans has reached a level where women improve their standing in a separate area of cultivation and

<sup>&</sup>lt;sup>12</sup> Colloquial for soybeans derived from the available stockcubes.

processing. The effect of the agricultural innovation associated with "soup" is a qualitative one. Dagomba women's encroachment upon the male territory of farming and the unfolding of the inhibited *kpalago* trade in Toendema do not result in massive change in the social organisation of agriculture. But these changes demonstrate a major shift in women's orientation and their perception of agriculture. The realisation of cultivation as a professional alternative for women through the agricultural innovation has lasting consequences for the gender relations.

## 8. Transforming staple, Transcending soup: The making and unmaking of gendered crops

The case studies allow statements on the making of gender. The embedding of new crops into the life-world of Kusasis and Dagombas induces changes in the embedding of knowledge. Since the orientation in everyday situations depends on local certainties and common places of a gendered nature, the advent of novelties challenges the existing constructions of gender. A negotiation over the categories and classification of the innovation discusses the "characteristics" of the presumably new and neutral technology. This is the ultimate link between gender relations and the effects of hereto-unfamiliar knowledge. On the "battlefields of knowledge," (Long 1992) agricultural crops turn into elements in the construction of gender. The instrumentalisation of "staple" as well as "soup" novelties in Dagbon and Toendema, respectively, unravel a high dynamic in the discourse over gender and the rhetorical use of presumably profane agricultural innovations. A synthesis of the findings on "staple" and "soup" according to ethnic groups reveals changes in gender relations. Both cases of differing gender construction dynamics portray an ideological connotation. Not only the crops in the field and their handling are altered, but social relations as well. In the Northern Region, agricultural change is reflected in dealings with the rather strong and distinctive mechanism of exclusion. The Upper-East-Region experiences a more gradual change in the content of social institutions. Thus we observe the making and unmaking of gendered crops.

#### References

- BRÜNTRUP, MICHAEL; BRÜNTRUP-SEIDEMANN, SABINE (1997) Women's Economic Activities in the Rural Areas of Borgou/North Benin - Opportunities and Selection Criteria. Pp. 1-23 in Bierschenk, Thomas (ed) Adapted Farming in West Africa (Hohenhein: University of Hohenheim)
- GOODY, JACK (1973) Polygyny, Economy and the Role of Women. Pp 175-190 in Goody, Jack (ed) *The Character of Kinship* (Cambridge: Cambridge University Press)
- GOODY, JACK (1992) Cooking, Cusine and Class A Study in Comparative Sociology (Cambridge: Cambridge University Press
- KIRBY, JON (1987) *Why the Anufo do not eat Frogmeat: The importance of taboo-making for development work.* in Occasional Papers Culture and Development Series 1, Tamale Institute of Cross-Cultural Studies, Tamale
- LACHENMANN, GUDRUN (1996) Transformationsprozesse in West-Afrika Widersprüche und Chancen für Frauenpolitik und Wandel der Geschlechterverhältnisse. *asien afrika lateinamerika* 24 pp. 231-251
- LONG, NORMAN; LONG, ANN (1992) (eds) Battelfields of knowledge (London: Routledge)
- MACK, BEVERLY (1991) Royal Wives in Kano. Pp. 109-129 in Coles, Catherine (ed) *Hausa Women in the Twentieth Century* (Madison: The University of Wisconsin Press)
- MAUSS, MARCEL (1996) Die Gabe. Form und Funktion des Austausches in Archaischen Gesellschaften 3rd ed. (Frankfurt: Suhrkamp)
- MAYDELL, HANS-JÜRGEN (1990) Trees and shrubs of the Sahel: their characteristics and uses (Weikersheim: Margraf)
- MBILINYI, MARJORIE (1997) Beyond Oppression and Crisis: A Gendered Analysis of Agrarian Structure and Change in Tanzania. Pp 317-364 in Imam, Ayesha (ed): *Engendering African Social Sciences* (Dakar: CODESRIA)
- MEIER, BARBARA (1997) "Weibliche Väter" und "kleine Frauen" Lebensfördende Rituale von Frauen bei den Bulsa, Ghana. Pp. 91-98 in Vögler, Gisela (ed) *Sie und Er. Frauenmacht und Männerherrschaft im Kulturvergleich* (Köln: Gesellschaft für Völkerkunde)
- MENSAH, AA. (1979) Folk Songs for Schools. Manuscript, Accra
- MOA (1990) Recipes for Soybean, Maize and Cowpea in Ghanaian Traditional Dishes. Extension S4, Women Farmers Extension Division, Department of Agricultural Extension Services, Ministry of Agriculture, Accra
- MOLYNEUX, MAXINE (1989) Androzentrismus der marxistischen Anthropologie. Eine Kritik zu Emmanuel Terray, 'Der historische Materialismus vor dem Problem der linearen und segmentären Gesellschaften'. Pp.100-136 in Arbeitsgruppe Ethnologie (eds) *Von fremden Frauen: Frausein und Geschlechterbeziehungen in nichtindustriellen Gesellschaften* (Frankfurt: Suhrkamp)
- PADMANABHAN, MARTINA A. (1998) Dawadawa, Sojabohnen und Maggiwürfel Innovationen und Geschlechterverhältnisse am Suppentopf Nordghanas. Pp. 353-357 in *Technischer Fortschritt in Spannungsfeld von Ernährungssicherung und Ressourcenschutz* (Hohenheim: Tropenzentrum)
- PADMANABHAN, MARTINA A.(2002) Trying to Grow Gender Relations and Agricultural Innovations in Northern Ghana. Münster: Lit
- TONAH, STEVE (1993) The Development of Agropastoral Households in Northern Ghana: Policy Analysis and Future Perspectives (Saarbrücken: Breitenbach)
- WARDROP-DELOITTE (1983) The Northern Region, Ghana. A Descriptive Overview. NORIP Technical Unit, CIDA, Tamale
- WHITEHEAD, ANN (1985) Effects of Technological Change on Rural Women: A review of Analysis and Concepts. Pp. 27-64 in Ahmed, A (ed) *Technology and Rural Women: Conceptual and Empirical Issues* (London: Allen & Unwin)
- WHITEHEAD, ANN (1993) Poverty in North East Ghana. Report to ESCOR, ODA, London